

BALTIMORE COUNTY, MARYLAND
SCHOOL FACILITIES TASK FORCE
REPORT



PREPARED FOR THE BALTIMORE COUNTY COUNCIL

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SCHOOL FACILITY TASK FORCE MEMBERS

Brian J. Rowe, Chairman
Baltimore County Auditor
Old Courthouse - Room 221
400 Washington Avenue
Towson, Maryland 21204

Linda Cotton
Baltimore County Chamber of Commerce
102 W. Pennsylvania Avenue, Suite 402
Towson, Maryland 21204

Elizabeth A. Crosby
Council of PTA's of Baltimore County
P.O. Box 43266
Baltimore, Maryland 21236

Stewart J. Greenebaum
1829 Reisterstown Road
Baltimore, Maryland 21208

Chang M. Kong
Towson State University
Economics Department
8000 York Road
Towson, Maryland 21204

Anthony Marchione
Superintendent
Baltimore County Department of Education
6901 N. Charles Street
Towson, Maryland 21204

Aaron Plymouth
8546 Stevenswood Road
Baltimore, Maryland 21244

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Executive Summary

This Task Force was appointed by the County Council in March 1996 and charged with the responsibility of formulating long-term strategies for construction and renovation of County schools. Although school overcrowding was identified by the Council as early as 1990, no comprehensive solution has been enacted to help alleviate overcrowded schools. The Task Force was appointed to help the Council take responsible action, by offering a set of specific solutions to address long-term school facility needs.

The strategies discussed in this report represent the consensus of a diverse group of individuals representing various viewpoints. These strategies may look somewhat familiar; they largely embody the principles laid out in the County Master Plan in 1989, and in other subsequent studies and statements. Thus, this report represents a coming full circle on the issue of the adequacy of school facilities. The strategies put forth in this report are meant to be a comprehensive solution to school overcrowding and should not be viewed individually. They encompass the following principles:

- Cooperative efforts by all parties in the development review and approval, and capital planning and construction processes;
- Appropriate and efficient use of County resources -- fiscal and other -- in anticipating and meeting school capacity needs;
- Openness to innovative approaches to school facility construction and use, and to the educational process in general.

The Task Force recognizes that it is acting only in an advisory capacity; it is the County Council's role to establish the appropriate policies. However, the Task Force believes that the strategies identified in this report provide a framework for a comprehensive approach to the County's school facility planning and funding needs, and that an acceptable set of proposals can be crafted within these guidelines. Developing

specific proposals to implement these strategies is not the sole responsibility of any one branch of government. This effort requires collaboration between the executive and legislative branches, working in the best interests of the County.

It is important to note that there have already been significant developments affecting the school capital budget during the period of our deliberations. These changes were the direct result of the work of the Task Force which brought to light the need for additional high school capacity. This heightened awareness of specific school facilities needs prompted the County Executive to propose and the County Council to enact an \$89.6 million School Bond Referendum, \$23 million more than was originally planned, which the voters will be asked in November to approve. This is not an increase in the total amount of the November bond referenda, but rather a reallocation from other project classifications. This is a significant step in the right direction in meeting our near future high school capacity needs, but as this report indicates, more needs to be done to address the issue of school overcrowding and adequate school facilities.

I would like to express my gratitude and appreciation to the members of the Task Force for their time and efforts and contributions to this report. Their sense of common purpose to achieve the desired goals led to spirited and substantive discussion on a wide range of issues. It was clear from the outset that each member believed strongly in the County's educational system and its importance to the County's economic development.

Mention should be made of the special assistance of various staff members from the Baltimore County Public Schools; in addition to aiding the Superintendent in his role as a member of the Task Force, they also provided important information on a range of topics that was very helpful to the Task Force.

I would also like to thank Tischler and Associates, Inc. for their valuable assistance in updating a prior study on school facility needs, and providing other insights into planning, development, and related topics. The Chamber of Commerce and the Baltimore County

Public Schools generously joined the Auditor's Office in providing financial support for these consulting services.

Finally, I would like to thank the members of the Council's staff and the County Auditor's Office. I would especially like to thank Thomas J. Peddicord, Jr., Legislative Counsel, Thomas A. Hancock, Fiscal Analyst, and Michelle F. Ganjon, Administrative Aide, for their support, guidance and cooperation.

Respectfully submitted,

Brian J. Rowe, CPA
Chairman

Background

During the 1970's and early 80's, Baltimore County was faced with an excess capacity of school facilities due to declining school enrollment, which fell from a high of 134,042 students in 1971, to a low of 80,630 students by 1986. Thus began the process of closing 23 schools; between 1976 and 1985, 19 elementary schools, 3 middle schools and 1 special education school were taken out of service and sold, leased or converted to other uses (e.g., office use), saving the county millions of dollars in the years of lower enrollment.

Following several years of lower enrollment, the school system experienced a new increase in student enrollment to 101,736 students in 1995, the highest in nearly two decades. This, coupled with school closings and reductions in average classroom sizes and capacity ratings, has resulted in school overcrowding, primarily at the elementary school level.

This task force is only the most recent expression of the County Council's concern for school overcrowding and capacity. The Council first took note of the problem in the Baltimore County Master Plan 1989-2000, adopted February 5, 1990, which recognized the issue of school overcrowding, and mandated that schools be given the highest priority for consideration of inclusion in adequate facilities legislation. The Council then took action with the enactment of Bill 127-90, "Interim Development Controls - Elementary School Capacity", effective October 1, 1990, which was intended to prevent additional residential development in areas with overcrowded elementary schools, while an adequate public facilities program was developed. The legislation defined overcrowded schools as those 20% or more overcapacity, and not adjacent to an undercapacity school, and also noted that schools which were 17% to 20% overcapacity were at risk of possible future impact.

Immediately following adoption of this legislation, the Business Development Council of the Baltimore County Chamber of Commerce contracted with Tischler and Associates, Inc., a nationally-recognized consulting firm in the fields of fiscal impact analysis and

related capital facilities programming, to study this issue. The specific objectives of the study were to evaluate the overcapacity conditions and related issues, assess the need for additional facilities over the ensuing decade, estimate the funding needed for this capacity, and make appropriate recommendations. The Tischler Report, entitled “Baltimore County Public Schools Future Facility Needs”, issued May 1991, made five recommendations:

1. Appointment of a broad-based School Facilities Task Force to review the report and make specific recommendations to the Schools and County government concerning facility planning and funding.

2. Aggressive implementation, and possible expansion, of the capital improvement program, along with the development of public support for such expansion.

3. Enactment of developer impact fees and optional privatization (cash contributions) for school construction, as a prerequisite for project approval.

4. Consideration of technical adjustments affecting capacity measurement, including student-teacher ratios, inclusion of relocatable classrooms and planned additions.

5. Consideration of changes in use of existing buildings (e.g., reopening, retrofitting) and planned new facilities (e.g. flexible use buildings, etc.).

The then County Executive implemented the first recommendation by appointing a School Facilities Task Force in August 1991, which included representatives of the Administration, BCPS, TABCO, the PTA Council, and the business community. This Task Force issued a report in April 1992 recommending consideration of alternatives to the interim development controls, based on a recognition that new home construction is not necessarily responsible for school overcrowding. Nevertheless, the Task Force also recommended that approval of new construction in overcapacity districts should take account of planned school construction, and that anticipated pupil yield should be

considered in all new construction approvals. Other recommendations included use of modular construction, adjustment of the capacity formula for student-teacher ratio changes, consideration of reopening closed schools, and a public information effort to build support for the funding of additional facilities.

Despite the findings of the Task Force concerning the impact of new construction, the Council decided to extend the development restrictions, replacing the “Interim Development Controls” with the “Development Controls for Elementary School Capacity”, Bill 112-92, effective July 1, 1992. This law contained the same general provisions as the prior law, and included an automatic expiration on July 1, 1995. The law required the Administration, Council, and Board of Education to annually develop a plan to eliminate overcrowded conditions identified pursuant to the law. As provided by law, this effort included analysis of the impact of the capital program, the use of redistricting and magnet schools to relieve overcrowding, the use of relocatable classrooms and their possible inclusion in capacity ratings, modular construction, a five-year projection of overcapacity conditions and the overall educational and economic impact of overcrowding and development restrictions.

During the nearly six years, including six annual map updates, since enactment of Bill 127-90, a total of 35 elementary schools have at some point been affected by the moratorium, including overcapacity and subject to building restrictions, overcapacity but adjacent to spare capacity schools, or identified as at risk of possible future impact. Schools have moved on and off the list -- and between categories -- due to the construction of additions and new schools, redistricting, changes in population, and other factors. During this time, some relief was provided by these efforts to create additional permanent capacity, change the use of existing capacity, and to use relocatable classrooms as temporary capacity. However, no long-term, comprehensive plan for insuring the adequacy of school capacity was developed. As the expiration of the development control law approached in June 1995, the County Council extended the law until July 1, 1996 by Bill 103-95 with the intent that a permanent solution be developed in the interim. In October

1995, a School Facilities Committee was appointed to suggest possible solutions to school overcrowding. The Committee reflected a broad range of interests and included school system personnel, including the retired superintendent of schools, County planning and budget personnel, PTA Council representatives, as well as representatives of the housing and business community. The primary recommendations in the Committee Report, issued in January 1996, were that the development control law be allowed to expire, and that a task force be appointed to study legislative alternatives, including adequate public facilities legislation, impact and/or user fees, and other creative solutions to assist with the financial burden of school construction and renovation.

Pursuant to this recommendation, a School Facilities Task Force was appointed in March 1996, to formulate long-term strategies for the construction and renovation of County Schools. The Task Force is representative of the varied perspectives concerned with this issue, and included the Superintendent of the Baltimore County Public Schools, President of the Baltimore County Chamber of Commerce, President of the Council of PTA's of Baltimore County, a prominent real estate developer and Chairman of the University of Maryland Medical System, a Professor of Economics at Towson State University, an educator and community activist, and the Baltimore County Auditor. In order to provide sufficient time for the Task Force to study the issue and prepare its report, the development control law was extended until November 1, 1996 by Bill 65-96.

To assist the Task Force, Tischler and Associates, Inc. was contracted to update and expand upon its 1991 report with respect to current and future school capacity and associated funding needs, and to make further recommendations to help alleviate school overcrowding (see Appendix A). Many of the consultant's recommendations are embodied in this report.

Current and Future Outlook of School Facilities Needs

The Baltimore County Public School System will serve more than 104,000 students in the 1996-97 school year. This enrollment is expected to reach a high of over 110,000 students by 2003, based on the Department's projection, before enrollment begins to decline. In contrast, current school facilities provide just under 106,000 seats excluding relocatable classrooms, and just under 110,000 when relocatables are included. After taking into consideration new construction included in the Adopted FY 1997 Capital Budget and Program, this capacity will increase to nearly 112,000 seats by 2005 (nearly 116,000 with the current inventory of relocatables). However, this apparent systemwide excess capacity masks wide variations between grade levels. A further review of this data indicates that surplus capacity in the elementary and middle schools will be partially offset by a significant capacity shortfall in high schools within the next few years.

The task force's deliberations on these issues over the past several months has raised public awareness of the current and pending problems in school capacity. This heightened awareness led to the proposed modifications to the Adopted Capital Budget and Program, including significant changes in funding priorities. The net result of these changes increases total school seating capacity to over 114,000 by 2005 (over 118,000 with current relocatables). However, a surplus of elementary and middle school capacity continues to be offset by a capacity shortfall in high schools, as discussed below.

Elementary Schools The current (1996-97 school year) elementary school seating capacity, excluding relocatables and planned construction, totals 52,271 seats. Enrollment for the 1996-97 school year is projected to be 53,052 students, reflecting a shortfall of 781 seats. However, beginning with the 1998-99 school year, enrollment is expected to level-off and will decline each year thereafter, to a low of 49,506 students by the year 2005. When only new capital construction is considered, capacity increases from 52,271 seats to 55,172 seats by 2005; including relocatables (adjusted between grade levels based on shares of total enrollment), the capacity increases from 54,424 to 57,093. The point at

which permanent capacity (excluding relocatables) first exceeds enrollment is in the 1998-99 school year; including relocatables, capacity already exceeds enrollment in 1996-97. The proposed revisions to the Capital Budget and Program modestly reduce planned additions to elementary capacity; permanent capacity increases to 54,752 by 2005, or 56,675 with relocatables.

Middle Schools Enrollment at the middle school level is projected to increase from 23,443 students in 1996-97 to a high of 26,968 students in 2002 and then begin to drop off to 25,230 students by 2005. Current capacity, excluding relocatables and planned construction, totals 26,715 seats; planned construction increases capacity to 27,715 seats by 2005; relocatables could further increase capacity to 28,428. Thus, on a systemwide basis, there is more than sufficient permanent capacity to handle enrollment projections now and through the year 2005. The proposed revisions to the Capital Budget and Program slightly increase the planned additions to middle school capacity, reaching 27,815 (28,528 with relocatables) by 2005.

High Schools Unlike enrollment at the elementary and middle schools, high school enrollment is projected to increase each year from 27,433 students in 1996 to 34,313 students by the year 2005. Capacity, however, will not keep pace with enrollment. Specifically, current capacity of 26,754 seats will increase to only 28,754 seats including planned construction, and 30,176 including relocatables, by 2005. This results in a shortfall of over 5,500 permanent seats (a 4,100 seat shortfall including relocatables).

However, the proposed capital budget revisions provide a fairly significant increase in high school capacity, up to 31,754 permanent seats in 2005; while this may eliminate more than half of the capacity shortfall, County high schools will still face a capacity shortfall of over 2,500 seats by 2005. Including relocatables, total capacity would be 33,173, resulting in a shortfall of more than 1,100 seats.

Conclusion On a systemwide basis, elementary and middle schools currently provide sufficient seat capacity and will provide sufficient capacity for projected enrollment

through the year 2005. There will be some clusters of crowded elementary and middle schools in some areas while some will be under enrolled. However, even under the revised capital budget, high schools will experience a significant systemwide shortfall in permanent capacity beginning with the 1997-98 school year which should continue and steadily increase through the 2005-06 school year.

The proposed changes to the Capital Budget and Program move in the right direction regarding the need for added high school capacity, but clearly more needs to be done. These further actions include both specific steps to provide additional capacity, as well as improved long-term capital and development planning and related efforts which take into account projected school facility needs. The alternative strategies presented in this report are intended to help ensure that history does not repeat itself, with the County forced to play catch-up in its capital budget, responding to pressing needs which should have been anticipated long ago.

It should be noted that this study is based upon ten-year enrollment projections by grade level provided by the Department of Education, primarily for use in capital planning. These ten year enrollment projections, based on Maryland Office of Planning projections and other data, have proven to be fairly reliable; however, enrollment projections beyond 10 years are not as reliable. The Department also makes short-term forecasts for the following year, for operating budget purposes. These annual estimates have proven very reliable on a systemwide basis with a better than 99% accuracy rate; however, individual school results are less predictable. Similarly, ten-year projections of individual school enrollment are useful for general planning purposes, but must be used with caution due to the potential for significant annual variations.

Comprehensive Alternative Strategies to Alleviate School Overcrowding

Development Moratorium

The Development Control Law (moratorium), which is due to expire November 1, 1996, is currently the County's only formal mechanism for addressing school overcrowding.

A listing of elementary schools currently affected by this moratorium may be found in Appendix D, Table 1. The moratorium has been in effect for over six years and during that time 35 elementary schools have been affected by the moratorium, including 25 overcapacity schools where building has been restricted at some point, and another 10 which have been identified as at risk but never subject to building restrictions. The provisions of the current law do not consider relocatables or planned capital improvements.

If these two factors are taken into consideration, none of the elementary schools would continue to be subject to the moratorium, even after considering the impact of new development based on approved and pending building permits.

Proponents of the moratorium argue that development directly impacts school overcrowding, and that the County's long-term economic health is dependent on an effective school system, which can not exist in severely overcrowded facilities. On the other hand, opponents argue that other factors contribute to school overcrowding, and point to overcrowded schools in older, re-populated neighborhoods. They point out that a moratorium is a stop-gap measure which does nothing to insure that adequate school capacity is created, and only impedes economic growth in the County. Both arguments have merit. Development does increase enrollment which may, but not necessarily, result in overcrowded schools. On the other hand, development does not contribute to overcapacity in older neighborhoods where there is no or minimal new development. Overcrowded schools are caused by a multitude of factors and therefore the solution to overcrowding must be as equally comprehensive. The Task Force views the development moratorium, in its current form, as a short-term solution or "quick-fix"; it does not view the moratorium as a long-term, comprehensive solution to school overcrowding.

While the moratorium may have some impact to forestall overcrowding in certain

schools, it does nothing to solve the problem and acts only to impede economic growth. Other creative solutions, such as those suggested in this report, should be pursued with the objective of striking a balance between promoting economic development and providing adequate school facilities.

School Construction Funding - Bonds and Project Delays.

The current Capital Improvement Program includes \$48.2 million in authorized and appropriated, but unissued, debt for school construction projects. In addition, another \$89.6 million for school construction projects is requested in the upcoming referendum for the 1998-99 biennium. This reflects the \$23.0 million increase to the original schools bond request, shifted from other project classifications, recently approved by the County Council at the County Executive's request. The proposal also reflects a reduction in estimated State funds, from \$32.2 to \$18.8 million. This re-estimate is based on the fact that planned changes in project priorities have not yet been presented to the State for funding approval; due to the uncertainty of State action, anticipated funds have been reduced. The revised biennial total is \$108.4 million for school construction.

There are many reasons why debt may remain unissued for several years, all related to the fact that debt is only issued in response to cash needs for the overall capital program. If certain projects are delayed, or are in design and planning stages where significant cash outlay is not needed, existing cash may be adequate and the issuance of new debt may be delayed. Also, specific fiscal management decisions may be made to restrict capital expenditures, thus delaying the need to issue debt and incur additional debt service costs; this has occurred in Baltimore County in recent years.

Although there may be reasonable explanations for previously-authorized debt to remain unissued -- even while additional debt authorization is sought -- every effort should be made to insure that projects which have received prior appropriations are not subject to long, unnecessary delays. There are recent examples of delays in school building projects for various reasons. For example, delays due to unanticipated high bids and construction

manager contracting can be seen in the Towson High Modernization project; site-related problems have delayed commencement of the Sparks Elementary reconstruction and new Southwest Elementary projects. On the other hand, there are examples of rapid execution of priority projects, such as the completion of 11 school additions in less than a year in 1994-95. In total, 10,000 seats are expected to have been added by the start of the 1996-97 school year through additions, reopening of closed schools, and changes in building usage. Efforts should be made to improve the setting of priorities, the planning and design of projects, and the management of the construction process to insure that this type of success is the rule rather than the exception in the future.

There are several ways in which the management of school construction and capital improvements can be strengthened, including stricter accountability within the current structure, and privatization of some aspects of capital program implementation. These and other concepts are discussed in greater detail later in this report.

School Construction Funding -- Grade Level Priorities

One of the primary conclusions of the Tischler and Associates Report is "It is apparent that capital plans for future school facilities should be shifted more towards high schools and away from elementary and middle schools as is presently the case. Changing systemwide enrollments indicate that elementary and middle school capacity shortfalls are or will be alleviated in the near future while high schools will face serious capacity shortfalls."

The Task Force agrees with this conclusion. Based on projections of declining student enrollments, elementary and middle schools will have surplus capacity of over 4,200 seats by the year 2000, while high schools will experience increasing enrollment and capacity shortfalls. As previously discussed, it is estimated that by the year 2005, under the Adopted Capital Budget, high schools will be over capacity by more than 5,500 seats. Even with the recently proposed revisions to the capital budget, there still will be a capacity shortfall in the high schools of more than 2,500 seats.

In order to help provide adequate high school capacity, serious consideration should be given to providing new or reallocated funds within the capital program to create additional high school seats. According to the average per-seat cost of high school additions included in the FY 1997 Capital Budget and Program, these total needed seats could cost close to \$50 million. However, it is important to note that only a portion -- and possibly a small portion -- of this would represent net additional capital cost; the bulk of these funds could be available from the following sources:

1. To the extent there is or will soon be excess capacity in elementary and middle schools (at least on a systemwide basis), a significant portion of the more than \$70 million in the FY 1997 Capital Budget and Program for added elementary and middle school seats can be reallocated to create additional high school seats, to help meet capacity shortfalls. While the proposed revisions increase the funding for high school projects, close to \$70 million remains for additional elementary and middle school seats; although this reflects higher per seat costs to provide fewer additional seats, further reallocations may be appropriate.

2. The Adopted FY 1997 Capital Budget reflects a new policy of "bundling" a portion of funds in general project categories such as major maintenance and roof rehabilitation, which are expected to later be reallocated to specific school construction projects (this concept is addressed in detail later in this report). The County Executive's adjustment to the Planning Board's recommended capital budget for schools added \$36 million to these general project categories, including \$24 million in reductions to specific school construction projects and \$12 million in additional funds. It can be expected that some portion of this \$24 million will be later reallocated to specific construction projects, and it would be reasonable for these to be high school projects. Further, the proposed capital budget revisions add more than \$22 million to the major maintenance project category in the later years of the capital program; a portion of these additional funds should also be reallocated to high school projects.

3. Other funds in the capital budget for specific modernization projects at all grade levels may later be reallocated to the construction of new high school capacity. The proposed revisions would eliminate some modernization projects for this purpose.

4. Some portion of the high school overcrowding will likely be accommodated through the use of relocatable classrooms, as is currently the case (the issue of relocatables is also addressed later in this report).

Capital Planning Process

The County's capital planning and budgeting process for schools involves participants with varied interests and perspectives -- the Department of Education, the Planning Board, the County Executive and his staff, and ultimately, the County Council. However, with each participant acting independently to implement their goals, and modifying the decisions of those who acted before, the process can be disjointed and inefficient; the result can be a capital program that appears to serve everyone's goals in part, but does not truly serve the County's long-term interests.

While the overall capital budget process is laid out in the Charter, procedural improvements can be made that do not require Charter amendment. In one recent experiment, Education, Planning and Budget Office staff met prior to the presentation of the Executive Budget and jointly developed agreed-on school capital priorities; the effort was not continued into subsequent years, and disjointed capital planning ensued. These meetings and discussions should be made a regular part of the planning process and should include representation from the State's Interagency Committee for School Construction (IAC); it is only through successive years of joint planning that true progress can be made.

The FY 1997 Capital Budget reflects a new policy of "bundling" a portion of funds in general project categories such as major maintenance and roof rehabilitation, which are

expected to later be reallocated to specific school construction projects. Specifically, the County Executive's adjustment to the Planning Board's recommended capital budget for schools added \$36 million to these general project categories, including \$24 million in reductions to specific school construction projects and \$12 million in additional funds. It can be expected that some portion of this \$24 million will be later reallocated to specific construction projects. This budgeting approach should be taken a step farther, with the creation of general project categories for additions and new schools by grade level; funds proposed for these projects in the capital program would be allocated to specific school projects when needs become clear. This approach serves two important purposes. First, it facilitates sound long-term fiscal planning by reflecting total anticipated funding needs in the capital program. Second, it achieves this goal without appearing to commit the County to specific school projects which may not ultimately be undertaken; the current practice of listing individual projects several years in advance of planned construction understandably creates community expectations about the future, which are difficult to overcome if conditions, needs or priorities change and those funds are redirected.

This move away from the premature identification of specific school construction projects in the long-range capital plan should also be incorporated into the planning process. The Budget and Planning Offices recently cooperated in making projections of school facility needs on a regional basis, rather than by individual schools; this provides more flexibility in responding to changing current and projected needs. It should also be recognized that this approach implies that redistricting, and more creative ideas such as shifting grade levels between elementary, middle or high school, must be seen as important tools in meeting facility needs.

Adequate Public School Facilities Law

The Baltimore County Master Plan and County Code state that development policies and regulations are intended to provide for adequate and efficient public and community services of various types, including schools. However, the development review and approval process in the Code does not specify any compliance, information reporting or other requirements concerning schools, other than the submission of development plans to

the Department of Education for review. Accordingly, the zoning regulations adopted pursuant to the Code also include no references to the provision of adequate school facilities.

As stated in the recent comprehensive study, Managing Maryland's Growth -- Models and Guidelines: Adequate Public Facilities (Maryland Office of Planning: June 1996), an Adequate Public Facility (APF) law is intended to:

...rein in 'runaway' development until facilities can be made adequate. APF...bases development approvals...on specifically defined public facility capacity standards. They are designed to curtail development in areas where public facilities are inadequate, and to delay development in planned growth areas until adequate service levels are in place or reasonably assured.

A review of other Maryland jurisdictions revealed that APF laws are fairly common. As summarized in Appendix B, 12 Maryland counties have some version of an APF law in the development review and approval process (including Carroll County's recently enacted Interim Development Control Law, which codified non-binding school facility and other standards already in place), covering facilities such as roads (all 12), water (11), sewer (10) and other facilities (7 cover one or more other categories, predominantly fire services). Eleven of the laws also have specific provisions for consideration of school capacity. This excludes Baltimore County's development control law, which is a school facility-based moratorium, rather than a component of the County's APF law. As noted in the study, "APF laws are more structured than specifically enacted legislative moratoriums which are generally last ditch efforts to control conditions where there are serious deficiencies." The oldest of these laws are in Montgomery and Prince George's Counties, which were both enacted in 1973. The details of these laws vary, including what capacity test is applied, how and when it is applied, and various allowable exceptions and waivers.

The Task Force recognizes that there are strong arguments on both sides of the APF issue in general, and regarding the specific provisions of such a law. Most of these arguments revolve around the issue of economic growth and development: opponents fear

an APF is merely a tool to stop development, and supporters see an APF as the only way to prevent overdevelopment and excessive demands on public services.

As stated in the State study, while APF laws "... are often seen as anti-growth mechanisms, a properly designed program will in fact facilitate economic growth and serve to streamline regulatory mechanisms." It is important that the public, and elected officials, recognize that an APF is not a panacea which solves all development and facility problems; instead, as noted in the study, the law "... must be applied in combination with many other planning tools, and in the context of a broader, comprehensive growth management plan program." It must also be coordinated with a realistic, long-term facilities assessment and capital planning program.

There is also a concern that an APF is designed for areas of rapid new growth, and may not help those older communities without significant new development which face overcrowding in the local schools due to changing demographics, repopulation or similar factors. However, as pointed out in the study, an APF can "... support the revitalization of older urban areas where facilities have the ability to absorb growth." In Baltimore County, where the conservation and revitalization of existing communities has been established as a high priority development policy, an APF law may help to insure that adequate public resources are directed to needs in the older communities, and that facilities in new development areas are not funded at the expense of these communities.

Along these same lines, the study points out that an APF law "... can help maintain the fiscal integrity of a government by helping to reduce the demands for excessive borrowing to finance new facilities which are demanded by unexpected growth."

Opponents also argue that an APF will not mandate that required capital planning is undertaken and funds appropriated to provide needed schools; the law may then simply act as a de facto building moratorium. While there is no simple response to these concerns, improvements to the capital planning and capital program implementation processes

discussed elsewhere in this report are critically needed in the County, whether or not an APF is enacted. However, when properly implemented, an APF is a key component in striking a balance between economic development and facilitating planning of adequate public facilities.

Also, as pointed out in the State study, administering an APF law can be administratively complex, costly and time consuming: these factors might also work to slow development review and approval. However, given that the County currently administers an APF for facilities other than schools, and a separate school-based development control law, administration of a comprehensive APF may in fact be less problematic than the current situation.

After considering arguments on both sides of the issue, and after considerable debate, the Task Force remained divided with respect to an Adequate Public School Facilities Law, with those that represent the business and development community on one side, and those that represent the community at large on the other. Representatives of the business and development community remained skeptical of the merits of an APF law for schools, believing that such a law is in reality a moratorium, while representatives of the community at large felt that such a law is long overdue as a legitimate planning tool for county government. Although a consensus could not be reached as to whether to recommend an APF for schools, there was general agreement that if such an APF were to be considered by the County Council, its provisions should embrace the following principles:

- Contribute to a growth management plan that promotes economic growth and regulatory efficiency, and concentrates growth in suitable areas where facility development is planned;
- Promote conservation of resources by avoiding expenditures on unnecessary facilities, and;

- Provide funding mechanisms that maximize efficient use of capital funds.

Specific provisions to implement these principles could be selected from among the following options:

Procedural provisions: Addressing adequacy of school facilities early in the development approval process, and at appropriate intervals, provides the best opportunity to resolve any potential problems:

1. At the informational conference prior to preparation of the concept plan, the developer should be encouraged to meet with the appropriate County agencies to obtain information about the schools in the service area affected by the development, including their current capacity and enrollment.
2. The concept plan should include a preliminary projection of the impact of the development on enrollment in the affected schools; if overcapacity is projected, the plan should include preliminary indications of how to relieve the overcapacity, including appropriate action required by the County.
3. The concept plan conference provides an opportunity for the department of education and other officials to comment on the projected impact of the development and plans to relieve any projected overcapacity.
4. The community input meeting provides an opportunity for other parties to raise any concerns about projected overcapacity or ways of providing sufficient capacity.
5. The development plan should include final projections of the impact of the development on enrollment in the affected schools, and revised proposals for

relieving any projected overcapacity, including the results of prior meetings and conferences.

6. During preliminary and final county review, including the development plan conference and the filing of comments, there is a final opportunity for the department of education and other agencies and parties to address remaining concerns about proposals for relieving any projected overcapacity.

Substantive provisions: Various options are available regarding the determination of adequate school capacity, allowable exemptions and other items:

1. The fundamental premise of an Adequate Public School Facilities Law is that no development plan or building permit should be approved unless the affected elementary, middle, high and other schools in the service area of the proposed development have adequate capacity for current enrollment, and for the projected additional enrollment resulting from the development, unless a specific exemption is allowed. However, the members of the Task Force felt that such a blanket restriction should not be imposed for a period of more than three years on a proposed development plan which is otherwise acceptable to the County. Should the County not take or pursue appropriate remedies within the 3-year period, development would be allowed to proceed.
2. Development restrictions should not be imposed if the ratio of projected enrollment in the affected school after considering the impact of the proposed development to total rated capacity of the school does not exceed 115% for an elementary school or 120% for a middle, high or other school.
3. School capacity should be determined by the county board of education using their standard methodology, but should exclude relocatable classrooms which are intended for use for no more than three years, and include

relocatable modular school additions which are intended for use for more than three years.

4. School capacity should be projected as of the time the projected enrollment increase will occur, based on pending or approved actions, or the use of funds which have been included in the most recently-approved capital budget and program.
5. The projected enrollment impact of development should be determined utilizing the county board of education's current average pupil yield ratio factors.
6. Development restrictions should not be imposed if overcrowding will be temporarily alleviated through the use of relocatable classrooms and is expected to be no more than three years in duration, at which time sufficient

capacity will be available due to declining enrollment, construction of additional capacity, redistricting or other means.

7. The following mitigating factors, which effectively provide adequate capacity or relieve overcapacity, may be taken into account to allow exceptions to the restrictions imposed by the requirement of adequate capacity:
 - a. The impact of the projects included in the most recently-approved capital budget and program, or planned for inclusion in the upcoming capital budget and program, including:
 - 1) Planned additions to an existing affected school which will provide adequate capacity;
 - 2) Renovation or replacement of an existing affected school creating additional seats which will provide adequate capacity;
 - 3) Construction of a new school in the service area of the proposed development which will provide adequate capacity; or
 - 4) Any of the above projects for a school in an adjacent service area to an affected inadequate capacity school, if the project will result in sufficient spare capacity to accommodate the excess enrollment from the affected school under a redistricting plan.
 - b. The affected school with inadequate capacity is adjacent to a service area with a school having sufficient spare capacity to accommodate the excess enrollment from the affected school under a redistricting plan.

- c. Other school district programs or initiatives which provide adequate capacity or relieve overcapacity, including grade realignments or reassignments, schedule changes, magnet schools, special program locations, work-study, early graduation or other programs.
- d. The Task Force also agreed that the Board of Education should be given the discretion to determine whether, in fact, a statistical projection of an “overcrowding” problem represented a real problem or whether the projected students could be accommodated without compromising the quality of education. The Task Force noted that, in some cases, “overcrowded” might mean only one more student per class, on average. It also recognized that, because definitions of “overcrowding” vary between the State and County, the School Board should have the discretion to make a judgment in cases where the problem may be merely statistical.
- e. Developer actions to assist in the provision of adequate capacity or relief of overcapacity, negotiated and agreed upon with the county board of education and office of planning, including the following:
 - 1) Inclusion of a donated school site in the development plan to serve the development or donation of a site to serve an adjacent district;
 - 2) Full or partial construction of an addition, new or replacement school or renovations which create adequate capacity; or
 - 3) Payment of a waiver fee established by the county board of education and office of planning and deposited into a special fund for use in constructing school projects. Such fees could

be specified as between \$1,000 and \$1,500 per unit, based on the extent and grade level of projected added enrollment.

- f. The hearing officer must make a finding that one or more of the above mitigating factors exist in order to approve a development plan that is projected to result in inadequate capacity.
- 8. General exceptions should be made for non-residential development; housing for the elderly; life care facilities; emergency or transitional housing facilities; sheltered housing for handicapped or disabled; child care facilities; and, any other development, project or facility which is determined to have no impact upon student enrollment.
- 9. A general exception should also be made for a development which has been issued building permits, grading permits and a public works agreement if required, or has had substantial construction commenced.
- 10. Provision should be made for development plans which result in inadequate capacity but meet all other county requirements. These plans may be processed, and placed on an approved waiting list in the order the plans are otherwise approved. The development would be allowed to proceed after a period of three years on the waiting list or earlier, if, prior to the expiration of three years, actions have been taken or events have occurred which provide adequate capacity or relieve overcapacity, or a finding is made that one or more of the above-described mitigating factors exists.

Funding Sources

Impact Fees To help finance school construction, Tischler and Associates recommended that serious consideration be given to implementing impact fees so new growth pays for its fair share of school capital costs. Baltimore County currently imposes

developer assessments in many cases to recover the appropriate share of infrastructure construction costs which is necessary for, or directly benefits, private development. The County has the authority under Section 33-1 of the County Code to impose properly-structured impact "taxes" to fund projects which are required for, or which benefit, new development. However, impact "fees", per se, require explicit approval of the General Assembly, but do not differ in effect from allowable impact "taxes".

In reviewing the role of impact fees, the Task Force noted the following:

- While such fees may be imposed on the developer, they are ultimately paid by the home buyer. As such, impact fees become just another tax, increasing the County's settlement costs which are already one of the highest in the region. This could have a negative impact on the County's economy.

- As noted by the Consultant, impact fees are regressive since they are the same regardless of the market value of the house.

- Impact fees are restricted to the district in which they are collected which severely limits their effectiveness in funding school facilities needs.

- While it can be argued that new growth should pay its fair share of school facility demands, all citizens benefit either directly or indirectly by the public school system.

- Impact fees may create an expectation, if not an obligation, to provide adequate school facilities. However, as noted in the Maryland Office of Planning study, "impact fees ...provide a means to raise additional funds for capital projects, but do not guarantee that sufficient funds will be available, and meanwhile have no effect on the pace of development."

In summary, the Task Force recognizes that impact fees can be an important tool in the appropriate circumstances; they are best utilized to help fund school construction or additions when it can be demonstrated that such projects would not be necessary in the foreseeable future, but for the projected enrollment impact of the new development. The Task Force believes that impact fees may not be sufficiently justified at this time, but that other funding mechanisms which are more broadly applied or more carefully targeted as discussed below are worthy of further consideration.

Excise Tax A broadly-applied excise tax would provide funds for various facility needs on a countywide basis. Authority for such a tax derives from the same broad County powers under which an "impact tax" could be imposed. The County may enact an excise tax on the use of particular types of property or products, for the purpose of regulating that use. Therefore, a general property development tax could be imposed.

Such a tax would have many of the same limitations as impact fees or taxes regarding the burden on home buyers. However, use of the proceeds would not be restricted to any specific area, nor to the provision of particular types of facilities, thus allowing a flexible and comprehensive County response to the impact of development. Nevertheless, because of the potential impact on home settlement costs, imposition of an excise tax may not be economically advisable at this time.

Waiver Fees If an APF were enacted, it could include provisions for developer payment of waiver fees or full or partial funding of needed school facilities. Several of the jurisdictions with APF laws allow developers who would otherwise be subject to restrictions

due to inadequate facilities to make specified payments into a special fund, for use by the County in providing necessary facilities in that area. In some cases, these are in addition to generally-imposed impact fees in the county. Again, such fees pose a burden that will likely be passed on to home buyers, but they have the advantage of being tied to specific facility needs related to a development project.

Privatization

Various aspects of the "privatization" concept may be appropriate in the school facility area. As noted above, developer contributions may be an option under an APF law to partially fund adequate facilities. Developers may also, under an APF law or on their own volition, provide full funding, arrange for financing, or actually construct, necessary school facilities.

During the Task Force discussion of these issues, it was suggested that public construction projects will almost always be more expensive and time-consuming than private sector projects, due to the involvement of many participants in the planning and design process, the need to obtain funding, the requirements of the bidding process, and other factors. It was further suggested that such costs in Baltimore County -- specifically school construction costs -- are among the highest of all jurisdictions.

Based on these considerations, it was suggested that the private sector could construct school facilities quicker and for less money than the public sector. The Task Force believes that it would be worthwhile to undertake a pilot project to determine the extent to which this is true. If successful, this approach should be more widely used.

A more limited privatization of the planning, design, construction and/or project management process may also be a useful tool. Most engineering work is now contracted

out, except for roof projects. Private construction managers have recently been used for several smaller projects, and a few larger projects, including Towson High modernization.

These approaches have the benefit of bringing appropriate professional expertise into the school construction program on an as-needed basis, rather than maintaining such personnel on staff; however, the technical and cost advantages may be somewhat offset by a loss of the direct accountability of County staff. It may also be more difficult to insure appropriate instructional staff input to the building design process if outside contractors are managing that process.

Reserving School Sites

One of the concerns raised by Tischler and Associates is an inadequate number of available school sites. Specifically, the consultant noted that "apparently the school board is running short of sites for new schools, especially high schools." One way to solve this problem is to identify future school sites as part of the development planning process and as development occurs, reserve and acquire the sites as needed.

This, of course, requires more predictable planning for school facility needs, as well as anticipating and budgeting site acquisition funds. While it may be difficult to obtain support for committing land or funds in advance of actual facility needs, this is an essential component of effective planning. One way to get more support for this effort is to make specific arrangements for alternative future public or private uses of reserved sites, if the anticipated need does not materialize.

Advance planning and funding for site acquisition is one of the primary advantages afforded by an adequate public school facilities law, since developers may be given the option of providing a school site within their development as a way of meeting the adequate facility test. By identifying facility needs early in the process, acquisition of a

school site can be incorporated into the development plan, and construction funding can be included in the capital program.

Use of Relocatables

The Department of Education's annual systemwide enrollment projections have proven to be fairly reliable with a 99% accuracy rate. However, enrollment at the individual school level is very difficult to project. Although systemwide enrollment projections reflect surplus capacity at elementary and middle schools by 2000, invariably there will continue to be facility needs at particular schools that are or will be critically overcrowded.

Over capacity at a particular school is viewed as either short-term or long-term. The Task Force defines "short-term" overcapacity as three years or less. Short-term facility needs should be accommodated by moving relocatable classrooms from under-capacity to over-capacity schools on a year to year basis as needed. Further, relocatable classrooms should not be counted in school capacity for purposes of determining long-term capital needs. The primary benefit of this approach is that it helps insure that short-term capacity problems are met by short-term facility solutions. This allows scarce capital funds to be allocated to long-term facility needs, rather than being needlessly spent on short-term problems.

Long-term capital needs, where overcapacity is expected to continue for more than three years at a particular school, should be met by capital additions, renovations or replacement of existing facilities where feasible. In the past, such capital improvements have been in the form of modular additions. These modular additions, however, are generally not relocatable. Today, there are modular units available that are truly relocatable. They are attached directly to existing facilities and not only include classrooms but other facilities as well, such as lockers, lavatories, etc. Consideration should be given to these "new" relocatable modular additions to meet long-term facility needs at a particular school. Further, these additions should be considered in capacity when located at a particular school. Once counted, capital construction funds could be shifted to other critical

areas.

Redistricting to Relieve School Crowding

The Maryland Annotated Code provides that, "with the advice of the county superintendent, the county board shall determine the geographical attendance area for each school...." BCPS' current Boundary Change Practices, established in 1986 in response to parental request for more involvement in the redistricting process, are included as Appendix C.

A primary goal in establishing school boundaries, and a central purpose in modifying those boundaries, is the equitable distribution of students among seats available in schools.

While redistricting may be used to relieve overcrowding in specific schools -- and arguably should be one of the first options considered when an overcapacity district is adjacent to an undercapacity district -- it may also be undertaken to serve other purposes. These include the improvement of feeder school patterns (elementary to middle and middle to high school) by standardizing boundaries of schools serving a given community, and the elimination of isolated "satellite" areas away from community schools which result from past space constraints or development and demographic changes. The racial balance of schools is also a permissible consideration when establishing school boundaries, but it may not be the sole reason and no legal hardship may result from the busing involved.

These and other factors must be taken into account whenever redistricting is considered. When carefully managed, school redistricting can maximize the efficient and effective use of current school capacity. Thus, demands on limited capital dollars are minimized. However, even the most logically and carefully planned redistricting process is subject to resistance because it frequently elicits highly emotional reactions from those potentially affected -- students, parents and business and community leaders. Special attention must be given to redistricting proposals in order to avoid violation of Civil Rights legislation due to changing demographic patterns within Baltimore County.

Changes in school boundaries should be as infrequent as possible; therefore, redistricting must be used only in response to long-term capacity problems. This is particularly evident in the case of high schools. As previously noted, the County is facing a significant capacity shortfall in its high schools. However, high school redistricting has a very slow impact on overcrowding because it is normally phased in over a four-year period. Therefore, redistricting should not be considered unless it is clearly an appropriate long-term solution.

As noted above, when an overcapacity district is adjacent to an undercapacity district, making better use of existing space through redistricting should be one of the first options considered, before consideration of construction of additional capacity. One recent situation combined both approaches. Arbutus Elementary had been more than 20% overcapacity and not adjacent to a district with adequate spare capacity, and thus subject to the moratorium, for several years through 1994. Construction of an addition at adjacent Relay Elementary created sufficient capacity to absorb some of Arbutus' excess students and redistricting in early 1995 reduced Arbutus' overcapacity level to just over 1% in 1995-96.

A currently pending overcapacity situation illustrates where redistricting might be considered as an alternative to new construction. Seven Oaks Elementary has been more than 20% overcapacity since 1993; in 1993 and 1994 it was subject to the moratorium, but in 1995 it was exempted because an adjacent school had adequate spare capacity. In fact, Seven Oaks is surrounded by spare capacity schools on three sides in close proximity, two of which (Gunpowder and Carney) each have more than twice as many spare seats as Seven Oaks would need to get below 20% overcapacity. Nevertheless, the

proposed FY 1997 Capital Budget and Program includes funds in FY 1998, totaling \$1.6 million, to build an addition to Seven Oaks.

Redistricting will always be difficult to agree on and to implement, for school officials, parents and students. There are cases where it best serves the educational process, regardless of fiscal considerations. In times of scarce public resources, it is even more important to carefully consider redistricting as a possible alternative to the expenditure of funds on new construction, where appropriate. Recognizing that redistricting is generally unpopular, it nevertheless is one of the primary responsibilities of the Board of Education to pursue this option in appropriate circumstances. The Board must be prepared to endure the criticism that may come with such decisions.

Adjusting Classroom Capacity

Currently, the State's Interagency Committee for School Construction determines school capacity using an average classroom capacity of 25 students, with adjustments for certain grades and classroom configurations; in the recent past this figure had been as high as 30 students. Baltimore County's capacity ratings use a class size of 24 for elementary and 26 for middle and high schools, with comparable adjustments. The Task Force discussed the impact of increasing the County's classroom capacity assumptions on total school capacity ratings, noting the corresponding effect on staffing and other operating budget items. For example, increasing middle and high school classroom capacity by just one student would increase capacity by over 2,000 seats systemwide; further, this adjustment would be consistent with the student-teacher ratio under the staffing levels funded in the current operating budget. Increasing the elementary school classroom capacity by just one student would increase capacity by over 2,100 seats systemwide; however, this adjustment would be inconsistent with the student-teacher ratio under the staffing levels funded in the current operating budget. Of course, the real impact of these adjustments is not to directly create any additional classrooms or capacity, but to alter the assumptions used for capital -- and operating -- budget purposes. If existing capacity is deemed able to accommodate additional students, then the need for additional construction

is lessened; if class sizes increase, then teaching staff can be reallocated.

It is important to note that raising the average class size also increases the range of class sizes. The resulting increase in class sizes may negatively impact instruction. The Task Force notes that increasing class size is counter-intuitive to the widely-held belief that every effort should be made to reduce class size to improve instruction. A review of recent research on this topic suggests a range of views on the impact of class size on quality of instruction. However, it does appear that smaller class size is most beneficial in those subjects which require more teacher-pupil interaction, and for those students who require more individual attention (economically disadvantaged, disabled, lower academic ability, etc.).

Extending the School Day

A properly managed program of flexible extended school day schedules -- primarily for high schools -- can effectively increase school capacity and provide expanded individual opportunities. Nationally, many school districts have tried new approaches since the 1994 report of the National Education Commission on Time and Learning. Extending the school day (or year) is the third most common approach to adjusting the use of time in schools, following redesigning available time (for example, the four-period block schedule) and the use of technology.

It should be noted that an extended school day approach is not the same as split-shift scheduling, with which the public may be more familiar. Split-shifts have been tolerated as a short-term solution to specific school situations, but would be opposed as a countywide policy. The extended school day is a comprehensive approach involving both day and evening school operations. With classes offered during two or three overlapping schedules, students will have many opportunities to take required and elective courses. At a school with sufficient numbers of students, scheduling can be more flexible allowing students to attend classes to suit their individual needs, and schedule work, an internship program, or part-time community college classes.

There are several issues that need to be addressed. There will be an impact on family schedules, as siblings might be on varying schedules affecting child care, dinner, and carpools. Some students will leave for school or arrive home in the dark during certain seasons. Transportation will be complex and could impact all schools in the feeder pattern. Teachers' and support services' contract issues will need to be reviewed. Scheduling will need to take into account teacher work loads, extremes in class sizes, and meeting, planning, and professional development times for groups of teachers countywide. Lunch shifts may need to be altered or increased.

While extensive planning would be needed to deal with this range of complications, it seems that the potential benefits of this concept warrant careful review by the school system.

Adjusting the Grade Levels in Middle and High Schools

The current organizational structure of middle school, grades 6-8, and high school, grades 9-12, was put into place throughout the state of Maryland and many places in the country about twenty years ago. The prevailing configuration prior to change was junior high, grades 7-9, and senior high, grades 10-12. The National Middle School Association believes that "the middle school is an educational response to the needs and characteristics of youngsters during the transition from childhood to full adolescence and, as such, deals with the full range of intellectual and developmental needs." Medical studies report that, on the average, children reach puberty nearly a year earlier than in the 1970s. This evidence might be additional rationale for the change in organization. Although some students in grades 6-8 may soon be able to earn a limited number of high school credits, the completion of these requirements is a primary educational task of

grades 9-12. Therefore, the move to add grade 9 to the high school, when creating the middle school, seemed logical.

Nationally there are a number of grade level structures, including elementary-middle school combinations of grades Prekindergarten-8, middle schools of 5-8, intermediate schools of 7-8, junior highs of 7-9, and junior-senior highs of 7-12. However, the 6-8 and 9-12 pattern is probably the most widely used. There is at least one school district in the state, Montgomery County, that created various groupings to accommodate patterns of enrollment. At the time that this was done, guidelines for the middle grades and high schools were distributed providing some consistency of expectations regardless of the grade level pattern.

Any change in the current grade patterns in Baltimore County would have to take into account not only the developmental and educational needs of students, but a number of logistical issues. The enrollment patterns of the feeder area over time would have to be considered, so as not to create the need to change grade level patterns every few years. A major consideration would be whether any grade reconfiguration must be countywide, to insure consistency, or if it would be workable to only make changes in particular schools. If the latter course were chosen, careful review and modification of computerized records, designed for the 6-8 and 9-12 configuration, would have to be made. The composition of faculties would have to be considered to assure that teachers with the appropriate expertise were available for the additional courses. Logistics such as transportation discussed in the section on extending the school day should be reviewed to determine if adjustments are needed due to grade level structure changes.

It must be recognized that there would be costs involved in modifying school buildings to provide facilities that adequately accommodate the program of studies, classroom configurations and other needs of different grade levels. In addition to such renovations of existing buildings, the design of new facilities -- whether new buildings or additions -- should be flexible so that space may be adaptable for use by different grade

levels at different times.

Participating in Cooperative Programs with Post-Secondary Institutions

The School system currently participates with the Community Colleges of Baltimore County and many four-year colleges and universities to provide a variety of opportunities for high school students. Although the current level of participation in these programs does not free up large numbers of seats in any one school, expansion of these programs could have an appreciable effect on capacity.

Students now are participating in part-time high school/part-time college programs that allow high school credit, college credit, or both to be earned. Students who are uncertain about making a commitment to college can take one or more courses with the support system offered by the high school. Students who have met their high school credits in three years or three and one-half, particularly at schools with the four-period day schedule, can take a limited number of courses at their high school and begin to earn college credit before graduation. The general education requirements of Maryland's post-secondary institutions or technical program credits can be earned in this fashion. In fact, in some schools, students are taking college level courses through distance learning. Further, discussions have just begun about a three-year Bachelor's Degree Program that involves the public schools, community colleges, and four-year institutions.

The expansion of these cooperative programs raises various issues affecting students, including the cost of tuition, financial aid for part-time students, and transportation. Issues are also raised for the schools, including the impact of these programs on staffing and course availability for non-college bound students. Instructional staff at the community colleges and the public schools now meet on a periodic basis to match academic standards and to discuss how best to prepare students for college expectations.

Internships and apprenticeships for students in the community are related options that have similar benefits and drawbacks to early college programs. Similar cooperative

efforts should be undertaken with the business community to address these issues.

Maintenance and Renovation Needs of Existing Facilities

The Baltimore County Public Schools have a total of 159 school buildings, totalling over 14 million square feet of original or added space. Of this total square footage, 67% was constructed prior to 1970; barely 11% of the total school space has been constructed or renovated since 1980. A July 1996 facilities inventory ranked over 10% of the buildings as "fair" condition or worse; a significant portion of the schools are in need of some form of modernization, renovation, roof replacement, or other major maintenance work.

While new capacity needs must be met, it is also essential that existing facilities serving established communities be maintained and improved. Although maintenance of school facilities does not directly increase school capacity, it has several obvious advantages. First, extending the useful life of existing facilities forestalls the need to create new facilities. If limited overcrowding must be endured in some facilities for the short term, it is much more tolerable if those facilities are in good repair. Also, in order for communities to more readily embrace the concept of redistricting, school facilities in neighboring districts must be well maintained. Further, well maintained school facilities located in older communities help attract new families. This helps to stabilize older communities and lessen urban sprawl, thus reducing the need for new facilities.

Recognition of these many benefits from an adequately funded maintenance and renovation program has caused the Task Force to view with some concern certain elements of the proposed revisions to the Capital Budget and Program. While the proposal adds new high school capacity, and funds general maintenance in the later years of the capital program, it also deletes two major and much-needed modernization projects,

and reduces funds for other specific renovation projects. It is important for the County to maintain a balanced program of new construction and maintenance and renovation of our older existing facilities.

The future quality of life in Baltimore County will be determined by decisions made today and tomorrow about the County's school system and other public facilities and programs, about economic development policy, and the interaction between these public and private choices. Everyone has a stake in that future, and a role to play in making these choices - students, parents, the public at large, educators, planners, elected officials, developers, and the rest of the business community.

The County's school facility problems have many causes, and have developed over a long period. Therefore, solving these problems requires a comprehensive approach and a patient effort. This report has not presented a blueprint which can be implemented immediately, but a concept plan or framework which requires a cooperative effort from all involved parties to decide on the best specific solutions.



**TISCHLER &
ASSOCIATES, INC.**

4701 Sangamore Road
Suite N210
Bethesda, MD 20816
(301) 320-6900
Fax: (301) 320-4860

80 Annandale Road
Pasadena, CA 91105-1404
(818) 790-6170
Fax: (818) 790-6235

Baltimore County Public School System

School Capacity Needs and Recommendations

**Baltimore County, Maryland
July 1996**

Fiscal Impact Analysis

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Capital Facility Analysis

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Impact Fee Systems

•

Growth Policy Planning

•

Economic and Market Analysis

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I. EXECUTIVE SUMMARY

The Baltimore County Public School system has been facing capacity issues since the late 1980's, when enrollment reversed its declining trend of the previous 15 years and began to increase each year. These increasing enrollments have been difficult to accommodate due to a reduced systemwide capacity. The effective capacity was reduced due to a combination of school closings and reductions in average classroom sizes and capacity ratings.

One reaction to this problem was the passing of legislation in August of 1990 enacting new development controls in areas of elementary school overcrowding. In 1991, Tischler & Associates, Inc. (TA) conducted a detailed capital needs study of the Baltimore County Public School System with the objective of providing various recommendations to address the problem. The results of the study indicated that the County was heading towards over-capacity conditions at all grade levels.

TA has been asked to re-evaluate the situation as it currently stands now, 5 years later. The purpose of this current report is to provide an update of the current and future school capacity and associated funding needs and to make further recommendations based on the updated findings.

A. Capacity Evaluations

The current and future capacity problems facing the Baltimore County Public School System can be summarized as follows.

Elementary Schools. When relocatables and new CIP construction are included in the projections, there is plenty of *systemwide* elementary school capacity through 2005. There are, however, facility needs at particular schools that are at critical over-capacity levels. Much of these needs can be accommodated in the short term by moving relocatables from under-capacity to over-capacity schools on a year to year basis. After 2000, capacity shortfalls at individual schools will decrease due to a declining elementary school enrollment overall. If relocatable and new construction are *not* included, then elementary schools have systemwide capacity shortfalls in 1995 and 2000 looking at every fifth year. This situation changes by 2005 due to declining enrollment.

Middle Schools. For middle schools, there are no current *systemwide* or school level capacity problems. By 2000, there will still be systemwide surplus capacity, although it is projected that two middle schools will exceed the 17 percent over-capacity threshold after including new construction and relocatables. Shifting relocatables can potentially solve this temporary problem. Similar to elementary schools, systemwide surplus capacity for middle schools increases by 2005, as enrollment declines.

High Schools. High schools face a potentially serious problem. Increasing high school enrollment over the next ten years will lead to serious over-capacity problems unless planning begins now and more capital facility funding for high schools is provided and implemented.

Systemwide, *including* planned construction and relocatables, there will be a capacity shortfall of approximately 1,700 students by 2000. By 2005, this shortfall will increase to approximately 4,400 students.

Based on the current CIP, total construction for the planned additional 2,000 high school seats over the next five years is estimated to cost \$33.06 million, or \$16,530 per seat. Based on this average cost per seat, an additional \$72.7 million in high school construction funds over and above what is in the CIP must be made available to accommodate the necessary 4,400 new seats by 2005. This translates into about 3 large high schools. This cost assumes new construction cost only (for additions or new schools), and does *not* include the possible use of additional relocatables to satisfy a portion of the capacity needs.

Conclusion. It is apparent that capital plans for future school facilities should be shifted more towards high schools and away from elementary and middle schools as is presently the case. Changing systemwide enrollments indicate that elementary and middle school capacity shortfalls are or will be alleviated in the near future while high schools will face serious capacity shortfalls.

B. Recommendations

Baltimore County Public Schools have taken significant steps to meet school capacity needs since the TA's 1991 report. Nevertheless, capacity shortfalls are still projected, particularly for high schools. Although Baltimore County's population is growing slowly, if steadily, this wave of students will increase pressures for funding construction of additional high school capacity. The previous section documents estimates for additional capacity needs, which will expand construction funding needs over and above the current CIP.

Based on the capacity and funding analysis, our interviews with county and school officials, as well as our past knowledge of the Baltimore County Public School system and similar issues elsewhere in the nation, we recommend a number of initiatives to address future funding needs, including:

- Agreeing that relocatables be included in the definition of short term school capacity criteria. Long term needs, however, still need to be addressed by new construction, as is the case for high schools over the next ten to fifteen years.
- Coordinating county and school board planning and forecasts of facility and funding needs, both long-range and short-range;
- Improving management of school facility planning, design, construction, and long-term maintenance and replacement; with privatization being a serious consideration,
- Designing flexible school facilities to meet changing needs; and
- Evaluating potential funding and growth management techniques to meet future facility needs.

II. BACKGROUND

In 1991, Tischler & Associates (TA) conducted a detailed capital needs study of the Baltimore County Public School System. TA was retained to conduct the study by the Business Development Council of the Baltimore County Chamber of Commerce, who sought to take a pro-active position in response to a 1990 moratorium on new development. The results of the study indicated that the County was heading towards over-capacity conditions at all grade levels. It was projected that by 1995, elementary, middle, and high schools systemwide would face capacity shortfalls, and the problem would only grow worse by 2000 unless an aggressive and organized capital facility program was enacted and funded.

Several recommendations were made to address and/or mitigate the impending problem. First, it was recommended that a School Facilities Task Force be assembled to consider the issues presented in the study and make recommendations regarding key policy and planning issues and funding priorities relative to new school facilities. Second, it was recommended that the then current CIP needed to be aggressively implemented, and possibly expanded and accelerated. Deferrals of projects would only exacerbate future over-capacity conditions. Third, TA recommended that mechanisms should be established through which new development would pay for its "fair-share" of needed school expansion. These mechanisms could include impact fees and/or the option of developer cash contributions ("privatization") towards school expansion or construction projects. The last recommendation discussed possible technical adjustments to capacity criteria including re-evaluating classroom capacity ratings, recognizing modular unit capacity, using numeric vs. percentage overage thresholds, and other technical adjustments which would have an effect on determining the level of need which must be accommodated.

It has been six years since the 1990 moratorium on new development. TA has been asked to re-evaluate the situation and to provide an update as to the current status of unmet needs and potential problems facing the Baltimore County Public School system. The impact (or lack thereof) of the moratorium and changing demographics, coupled with actions taken since 1991 by the County to address the impending school overcrowding problem, may have changed both the nature and the degree of the problem.

The purpose of this current report, therefore, is to: a) determine how (if at all) the problem has changed, b) provide an update of the current and future school capacity and associated funding needs, and c) to make further recommendations based on the updated findings.

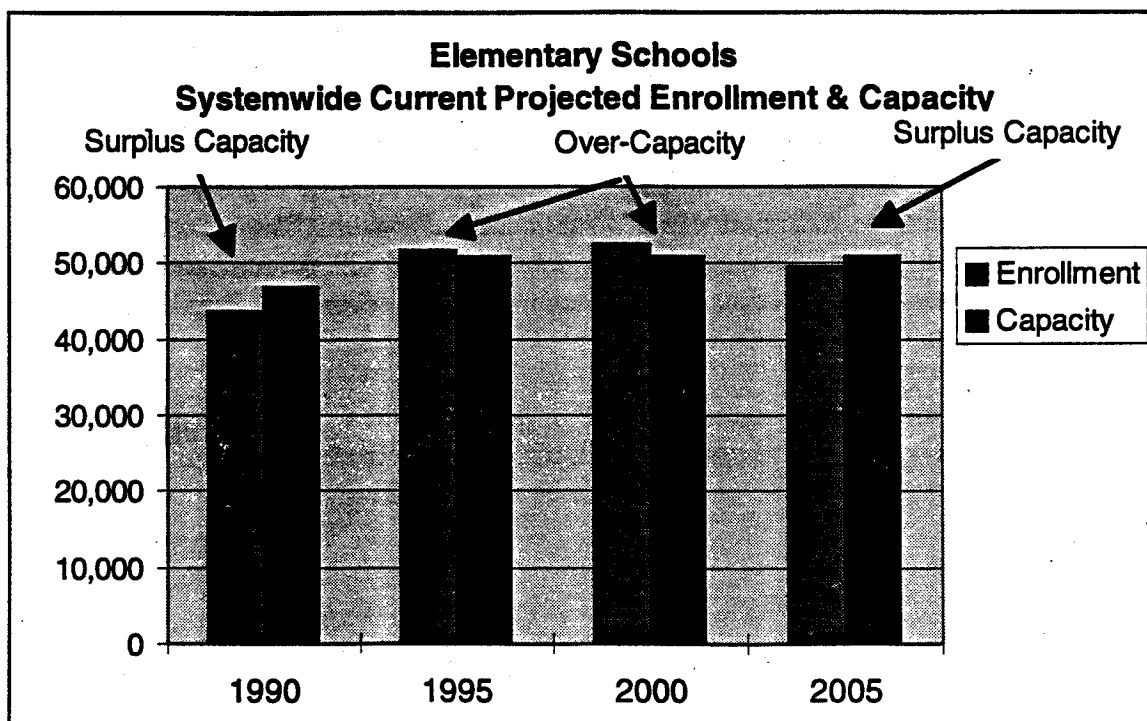
III. CURRENT AND FUTURE CAPACITY

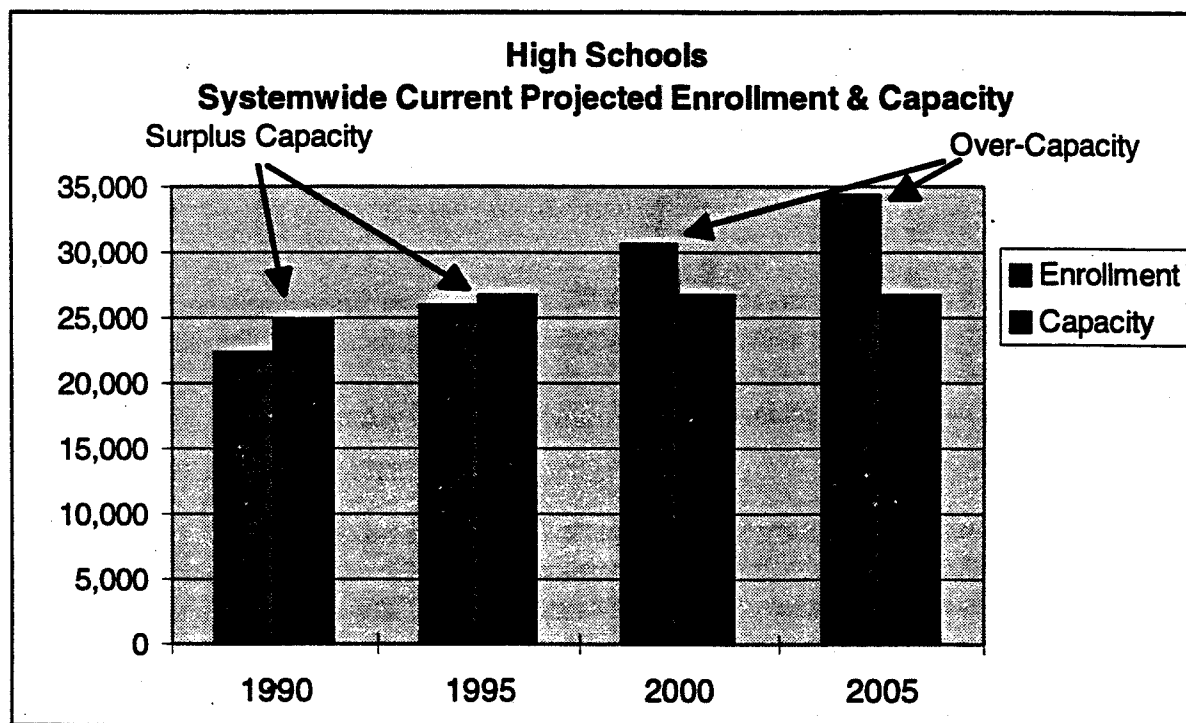
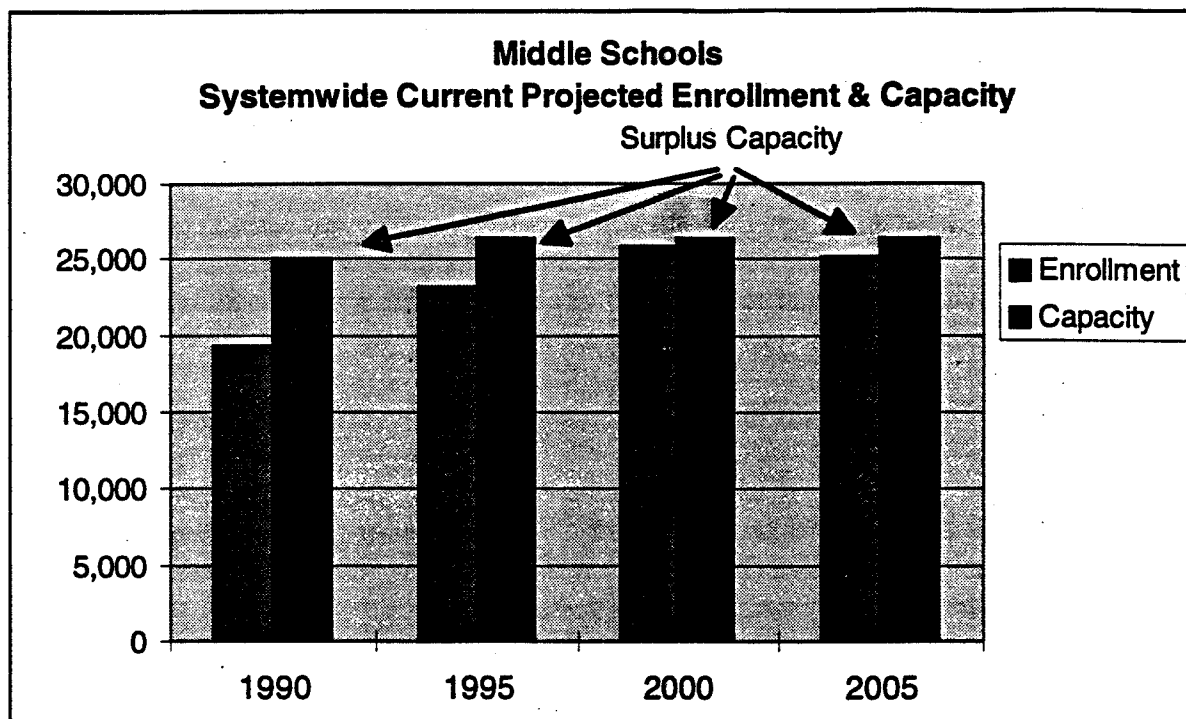
A. Systemwide Projections Excluding Relocatables and New Construction

As indicated in the previous section, TA's 1991 report projected that elementary, middle, and high schools would reach capacity by 1995 and grow worse by 2000 unless an aggressive capital facilities program was implemented.

In 1990, all three school types, elementary, middle, and high school, had surplus capacities. By 1995, however, it was projected that all three would exceed capacity, with the problem only growing worse by 2000. High schools would face the greatest capacity shortfall in terms of percentage over-capacity, followed by middle schools and then elementary schools.

Existing 1995 conditions and current systemwide projections reveal a slightly different picture than was presented 5 years ago. The charts below show the current situation for elementary, middle, and high schools. All 1995 capacities and enrollments are based on information provided by Baltimore County Public Schools (BCPS), which does *not include relocatable classrooms* in capacity ratings. Projected enrollments also come from BCPS. All future capacities assume *no new construction* after 1995.





In 1995, systemwide, elementary schools were only slightly over-capacity, and middle and high schools still had surplus capacity. Projections for 2000 and 2005 indicate that elementary schools will still be slightly over-capacity in 2000, but by 2005 there will be surplus capacity. Middle schools show the greatest change from the previous projections, with projected surplus

capacity in 2000 and 2005. (There will be, however, a slight over-capacity problem for middle schools between the years 2000 and 2005 as middle school enrollment increases slightly before dropping off.) Similar to the previous projection, high schools are still projected to face the greatest shortfall during the next ten years.

All projections above assume no new construction after 1995, and do not include relocatable classrooms. In reality, the situation changes if relocatables are included and much of the needs can be met through additional construction currently planned. This is discussed in more detail in the section below.

B. Systemwide Projections Including Relocatables and New Construction

There are currently 169 relocatable classrooms in the Baltimore County School System. Ninety of these are located at elementary schools, 31 located at middle schools, and 48 located at high schools. Each relocatable classroom has 24 seats on average. The relocatables and the number of students they accommodate are summarized in the table below.

Relocatable Classrooms (1995/96 school year)
Baltimore County

	Number	Students
Elem. School Relocatables	90	2,160
Middle School Relocatables	31	744
High School Relocatables	48	1,152
Total	169	4,056

Source: BCSS Office of Capital Planning

The table on the next page shows the approved FY97 capital budget for schools and the five year Capital Improvement Program for Baltimore County's Board of Education. The improvement projects have been divided by school type and by type of project (projects that will provide expanded capacity in the form of additions or new schools and projects that are for replacements or upgrades).

A total of \$26.1 million in elementary school projects that will lead to expanded capacity (additions, modernizations, or new schools) are included in the CIP. Approximately 20 percent, or \$5.2 million, of this total is funded in the FY97 budget year. CIP dollars allocated for middle school capacity improvements totals \$55.9 million, with \$5.6 million of this amount funded in the FY97 capital budget. High school capacity expansion projects amount to \$33.1 million, with \$7.7 million slated for the FY97 budget.

The estimated number of new seats by the years 2000 and 2005 are shown in right hand columns of the table. By 2005, there will be 3,495 new seats for elementary schools. Middle schools will have 2,550 new seats, and high schools will have 2,000 new seats by 2005.

Capital Improvement Program Baltimore County Public Schools

Projects	Total	Prior	Total	Budget	Five Year Capital Program					Balance	Est. New Seats by 2000	Est. New Seats by 2005
	Est. Cost	Author- izations	for 6 Yr Program	Year FY97	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	To Complete		
ELEMENTARY SCHOOLS												
Additions/New												
Franklin Addition	1,250		1,250		1,250						214	214
Seven Oaks Addition	1,250		1,250		1,250						214	214
Mars Estates Addition	1,375		1,375				1,375				0	191
Seventh District Addition	1,250		1,250	1,250							214	214
Featherbed Lane Addition	1,600		1,600	1,600							382	382
Hebbville Addition	1,250		1,250		1,250						191	191
Southwestern Area New	6,449	4,100	2,349	2,349							520	520
Glyndon Addition	1,997	622	1,375				1,375				214	214
Woodholme New	6,527		6,527				6,527				0	500
Lutherville Addition	1,512		95						95	1,417	0	214
Subtotal	24,460	4,722	18,321	5,199	3,750		9,277		95	1,417	2,399	3,304
Replacements/Upgrades												
Woodmoor Modernization	1,632	767	865	865							191	191
Edgemere Renovation	6,396	4,100	2,296	2,296							0	0
Martin Blvd. Replacement	6,383		6,383	6,383							0	0
Sparks Replacement	7,381	3,972	3,409		3,409						0	0
Colgate Replacement	6,527		6,527				6,527				0	0
Subtotal	28,319	8,839	19,480	9,544	3,409		6,527				191	191
MIDDLE SCHOOLS												
Additions/New												
Catonsville Addition	4,901	250	4,651		4,651						300	300
Franklin Addition	17,994		17,994	711	17,283						400	400
Perry Hall Addition	5,730	4,993	737	737							400	400
Nottingham New	15,528		687						687	14,841	0	1,000
New Town (New)**	11,800	364	11,436		11,436						450	450
Subtotal	55,953	5,607	35,505	1,448	33,370				687	14,841	1,550	2,550
Replacements/Upgrades												
Sparrows Pt. Modern***	21,856		21,856						21,856		0	0
Subtotal	21,856		21,856						21,856		0	0
HIGH SCHOOLS												
Additions/New												
Perry Hall Addition	9,330	7,740	1,590	890	700						500	500
Dulaney High	7,602		7,602	317	7,285						500	500
Franklin High	8,064		8,064				8,064				0	500
Pikesville High	8,064		8,064				8,064				0	500
Subtotal	33,060	7,740	25,320	1,207	7,985		16,128				1,000	2,000
Replacements/Upgrades												
White Marsh/Nottingham	450		450				450				0	0
Towson Modernization	17,952	16,338	1,614	594	1,020						0	0
Kenwood Modernization	20,750		20,750	800	17,950		2,000				0	0
Catonsville Modernization	16,473	715	15,758		15,758						0	0
Subtotal	55,625	17,053	38,572	1,394	34,728		2,450				0	0
OTHER												
Fuel tank Replacements	6,392	1,792	4,600		1,000		1,800		1,800			
Access for the Disabled	2,000	800	1,200		400		400		400			
School Buys Parking Lots	350		350		350							
Ridge School Renovation	776		776	776								
Major Maintenance	52,335	11,691	40,644	135	5,000		20,354		15,155			
Alterations/Code Updates	18,884	5,484	13,400		400		8,000		5,000			
Roof Rehabilitation	84,254	56,754	27,500		7,000		10,250		10,250			
Site Improvements	10,610	4,105	6,505		505		4,750		1,250			
Asbestos Abatement/Rem	17,405	10,405	7,000		2,000		3,000		2,000			
Subtotal	193,006	91,031	101,975	911	16,655		48,554		35,855			
GRAND TOTAL	412,279	134,992	261,029	19,703	99,897		82,936		58,493	16,258	5,140	8,045

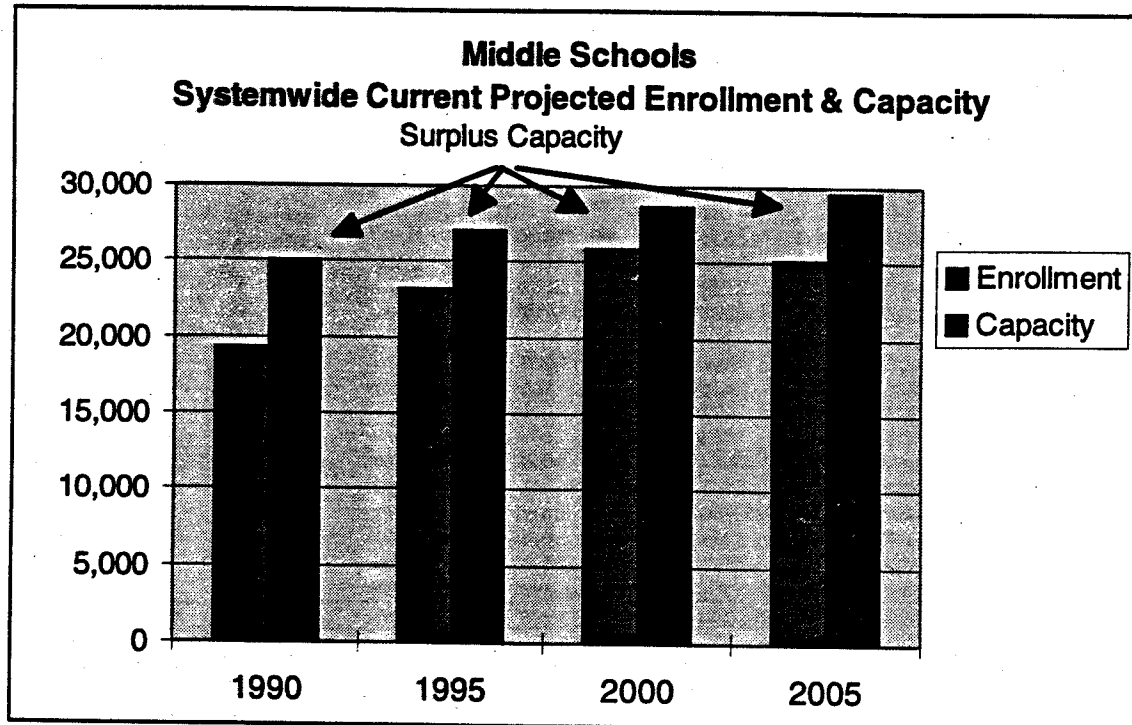
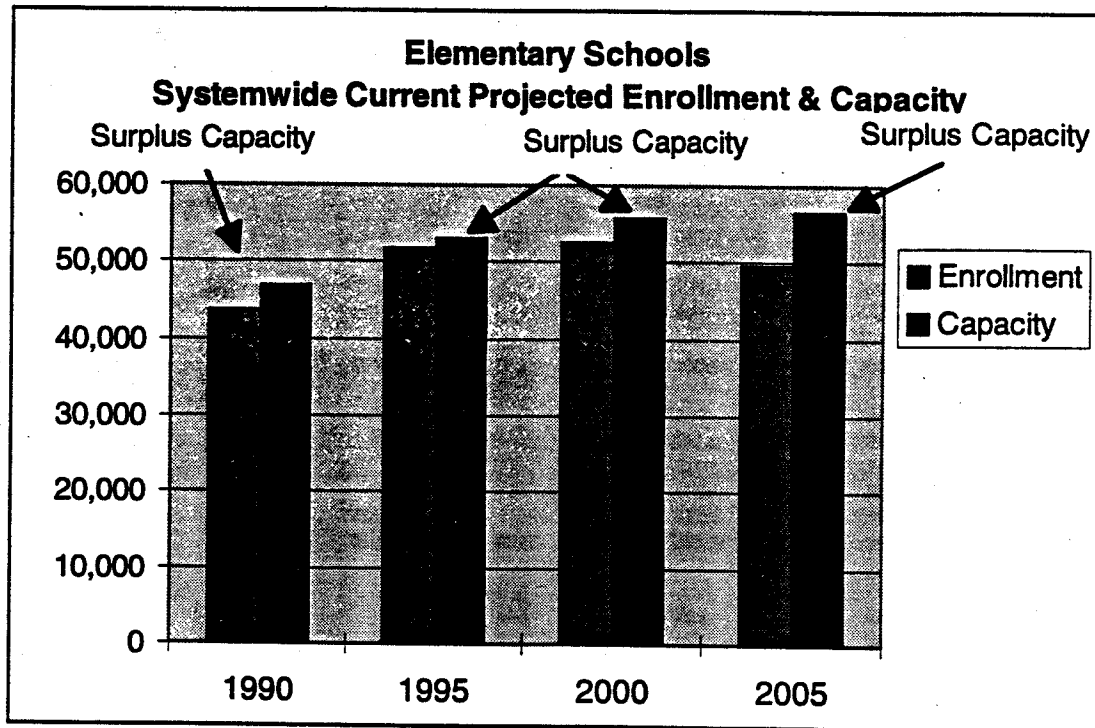
Source: FY1997 Baltimore County CIP

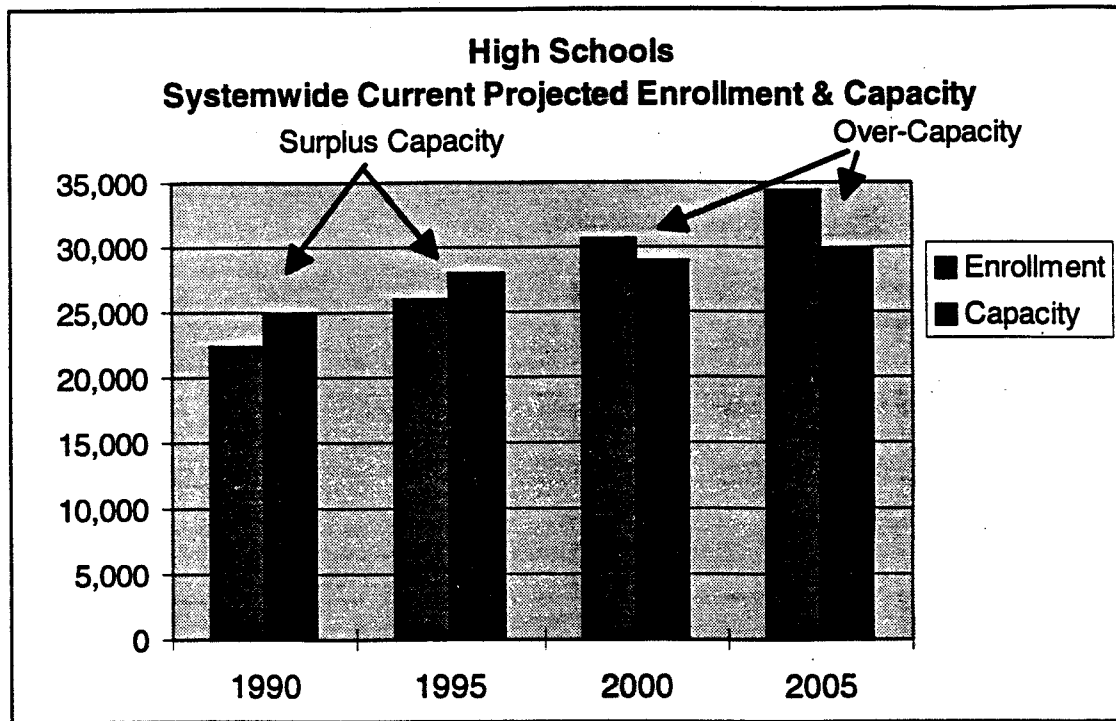
* Includes 450 seats from New Town middle/elementary.

** New town is a combined middle and elementary school. 50% of the 900 new seats are split between elementary and middle.

*** Sparrows Point is a combined middle and high school

The charts below show total enrollment versus capacity for elementary, middle, and high schools when both relocatable classrooms and new construction are included.





Comparing the previous charts, which do not include relocatables and future CIP construction, to the above charts that do include these items, it is apparent that the major difference lies with elementary schools. After including relocatables and new construction, elementary schools have surplus capacity for all years. As previously indicated, without relocatables and new construction, elementary schools face capacity shortfalls in 1995 and 2000. Middle schools have greater surplus capacity for all years shown when relocatables and new construction are accounted for. High schools still face capacity shortfalls even after relocatables and new construction are included, although the shortfalls are not as significant as before.

It is apparent from these comparisons that capital plans for future school facilities should be shifted more towards high schools and away from elementary and middle schools as is presently the case. Changing systemwide enrollments dictated by Baltimore County demographics indicate that elementary and middle school capacity shortfalls, depending if new construction and relocatables are included, already are or will be alleviated in the near future while high schools will face serious capacity shortfalls.

C. Overage Criteria and Individual School Analysis

In TA's previous report it was indicated that systemwide totals of enrollment and capacity can be misleading. Over-capacity situations occur at the individual school level. Hence, further statistical analyses were undertaken to project the number of individual schools which may exceed over-capacity criteria, and the amount of enrollment in excess of this criteria. The increment of over-capacity enrollment which needs to be accommodated with expanded facilities was assumed as enrollment in excess of 17 percent above each school's rated capacity. The 17

percent criteria was based on provisions of the Interim Development Controls, which designated a 17 percent over-capacity condition as a warning list.

Based on these criteria and current projections, the total capacity need has been calculated for 1995 and 2000. The table below shows the actual situation in 1995 based on the 17 percent threshold criteria both with and without relocatables.

**1995 Schools and Enrollment Exceeding Overage Criteria
Baltimore County Public Schools**

School Level	Actual Status in 1995		Actual Status in 1995 with Relocatables	
	Number of Schools Exceeding 17% Over-Capacity	Over-Capacity Enrollment To Be Accommodated	Number of Schools Exceeding 17% Over-Capacity	Over-Capacity Enrollment To Be Accommodated
Elementary Schools	20	809	4	126
Middle Schools	0	0	0	0
High Schools	3	537	0	0

Source: Baltimore County Public Schools, Tischler & Associates

If relocatable classrooms are not included, 20 elementary schools exceed the 17 percent threshold capacity in 1995. The total over-capacity enrollment to be accommodated is 809 students. If relocatables are included, then only 4 elementary schools exceed capacity with a total over-capacity enrollment of 126. No middle schools exceed the 17 percent over-capacity threshold, although 3 high schools do if relocatables are not counted. However, if relocatables are included then there are no high schools at over-capacity.

The table below shows the 2000 projections based on the 17 percent threshold criteria both with and without relocatables *and* planned additions. It should be noted that these projections assume that the relocatables remain where they were in 1995. In reality, relocatables move each year based on demand, and hence the results could potentially be optimized better than shown below. Also, construction of planned new schools may take the burden off some of the existing schools, which is not reflected in the table below.

**2000 Schools and Enrollment Exceeding Overage Criteria
Baltimore County Public Schools**

School Level	Current Projections for 2000		Current Projections for 2000 with Reloc and Additions	
	Number of Schools Exceeding 17% Over-Capacity	Over-Capacity Enrollment To Be Accommodated	Number of Schools Exceeding 17% Over-Capacity	Over-Capacity Enrollment To Be Accommodated
Elementary Schools	34	2,537	20	969
Middle Schools	6	668	2	362
High Schools	9	2,625	6	1,647

Source: Baltimore County Public Schools, Tischler & Associates

By 2000, the number of schools exceeding the 17 percent over-capacity criteria grows. An estimated 34 elementary schools will be at over-capacity by 2000. The total number of students to be accommodated is 2,537. If planned school additions and relocatables are accounted for, the

number drops to only 20 elementary schools with 969 students. Six middle schools are at over-capacity without relocatables and additions, but only 2 are at over-capacity when relocatables and additions are included. High schools fair the worst in terms of total students needed to be accommodated. Even after including relocatables and additions, over-capacity is exceeded by a total of 1,647 students at 6 high schools.

D. Summary

It is clear from both the system-wide and the individual school analysis, that although there is still a capacity problem facing the Baltimore County School System, the nature and degree of the problem has changed. The following points summarize the current and projected situation:

- When relocatables and new CIP construction are included in the projections, there is plenty of *systemwide* elementary school capacity. There is, however, facility needs at particular schools that exceed the 17 percent over-capacity criterion, assuming no redistricting. Much of these needs can be accommodated in the short term, however, by moving relocatables from under-capacity to over-capacity schools on a year to year basis. After 2000, capacity shortfalls at individual schools will decrease due to a declining elementary school enrollment overall.
- For middle schools, there are no current *systemwide* or school level capacity problems. By 2000, there will still be systemwide surplus capacity, although it is projected that two middle schools will exceed the 17 percent over-capacity threshold after including new construction and relocatables, assuming no redistricting. Shifting relocatables can potentially solve this temporary problem. Similar to elementary schools, systemwide surplus capacity for middle schools increases by 2005, as enrollment declines.
- High schools face a potentially serious problem. Increasing high school enrollment over the next ten years will lead to serious over-capacity problems unless planning begins now and more capital facility funding for high schools is provided and implemented. Systemwide, *including* planned construction and relocatables, there will be a capacity shortfall of approximately 1,700 students. By 2005, this shortfall will increase to approximately 4,400 students.
- Based on the current CIP, total construction for the additional 2,000 high school seats is estimated to cost \$33.06 million, or \$16,530 per seat. Hence, by 2005 an additional \$72.7 million in high school construction funds over and above what is in the CIP must be made available to accommodate the necessary 4,400 new seats. This cost assumes new construction cost only (for additions or new schools), and does not include the possible use of relocatables to satisfy a portion of the capacity needs.
- It is apparent that capital plans for future school facilities should be shifted more towards high schools and away from elementary and middle schools as is presently the case. Changing systemwide enrollments indicate that elementary and middle school capacity

shortfalls are or will be alleviated in the near future while high schools will face serious capacity shortfalls.

IV. RECOMMENDATIONS

Baltimore County Public Schools have taken significant steps to meet school capacity needs since Tischler and Associates, Inc. 1991 report. The school board has completed construction of two new elementary schools as well additions to existing elementary schools, *and* has re-opened two schools previously closed, creating total new capacity for 5,555 elementary school students. A total of 1,801 new seats have been added to middle schools, and 2,349 new seats for highs schools. For all schools, the board has expanded use of relocatable classrooms, significantly reducing potential funding needs for new construction.

Nevertheless, capacity shortfalls are still projected, particularly for high schools, which are now experiencing the large wave of students produced by the "baby boom" generation. Although Baltimore County's population is growing slowly, if steadily, this wave of students will increase pressures for funding construction of additional high school capacity. The previous section documents estimates for additional capacity needs, which will expand construction funding needs over and above the current CIP.

Based on the previous analysis, and an analysis by Doug Porter of the Baltimore County Public School system, we recommend a number of initiatives to address future funding needs, including:

- agreeing that relocatables be included in the definition of short term school capacity criteria. Long term needs, however, still need to be addressed by new construction, as is the case for highs schools over the next ten to fifteen years.
- coordinating county and school board planning and forecasts of facility and funding needs, both long-range and short-range;
- improving management of school facility planning, design, construction, and long-term maintenance and replacement; with privatization being a serious consideration,
- designing flexible school facilities to meet changing needs; and
- evaluating potential funding and growth management techniques to meet future facility needs.

1. Agree on Definition of School Capacity

Until the county and school board staff can agree on a definition of school capacity, it will be impossible to clearly determine existing and future capacity needs, which must be accomplished to structure a reasonable, definite program of facility funding and construction. The principal issue is how to define relocatable classrooms – as temporary but inadequate space or as real capacity. The school board maintains that relocatable classrooms are poor substitutes for first-class space, and therefore should not be counted in assessing current school capacities. The County claims that relocatable classrooms are clearly temporary in nature and provide significant capacity to meet

present needs. Both positions are correct, but neither comprehends the total meaning in terms of determining capacity needs.

Relocatable classrooms represent an efficient means of providing capacity for a *temporary* need, which can be defined as a specific number of years. They have been useful in meeting the needs of the bulge of elementary school students moving through the schools over the past ten or so years. Within a very few years, they will not be needed at most elementary schools as that population-age group declines. If Baltimore County Public Schools had constructed permanent classrooms for that number of students, a substantial amount of unused capacity would exist by the year 2000.

The problem is really centered on a number of specific schools where such classrooms have been in place for many years, providing learning environments that some find unsatisfactory and overburdening common facilities in school buildings. Such circumstances will not be completely avoided in future years unless student projections can be more closely matched to capacity availability, thereby pinpointing construction needs. Although school planners generally do a good job in forecasting capacity needs for individual schools, these necessarily are limited by unforeseen neighborhood changes, population shifts, and restraints on adjusting school boundaries. This problem underscores the need for better coordination between county long-range planning and school capacity planning, which is addressed in the next point.

The problem is exacerbated, however, by the current county and school board disagreements over definitions of capacity. **It should be agreed upon that relocatables be included in the definition of short term school capacity. As shown in Section I of this report, by including relocatables in school capacity criteria much of the elementary and middle school needs have and can be met in the short term. Long term needs, however, still need to be addressed by new construction, as is the case for high schools over the next ten to fifteen years.**

2. Coordinate County and School Forecasts and Planning

The county Planning office, in coordination with the Metropolitan Council, projects population statistics for the county and about a dozen subareas. The school staff projects future students based on counts of students entering the system and surveys of development in school areas. It would be helpful if the two staffs coordinated their forecasts to produce a current picture of change and development in the various parts of the county to guide facility planning. The planning director suggests that such coordination might be accomplished through joint staff preparation of periodic (two or three years) reports to the council on the latest updates of Census and other population data, including student projections.

With coordinated projections in hand, both offices should also coordinate school facility planning. Coordination should include the school staff taking into account information routinely obtained by the Planning office on current and prospective developments that would require new or enlarged school facilities. Coordination should be aimed at producing a workable program of facility construction as a component of the county's capital improvements program, including new construction, maintenance, and replacement, and with realistic estimates of phasing, funding, and production. Conflicts, issues, and trade-offs among needs should be accomplished through facility

planning discussions based on accurate information rather than through the present system of various offices producing alternative policy and action scenarios.

Both the county and the school board should establish processes and routines for exchanging information and reaching agreement on facility construction and funding needs that would provide predictable, realistic inputs to the County's capital improvements program.

3. Improve Facility Planning and Management

Baltimore County Public Schools has perhaps the largest real estate portfolio, in terms of land, buildings, and value, of any organization, public or private, in the county. Its real estate holdings are constantly expanding as new schools are added. Not surprisingly, its holdings also are aging as schools built during the high-growth postwar years are becoming 40 to 50 years old.

It has become apparent that the school board needs to recognize growing needs for improving facility planning and management, especially in coordinating school planning and design with project construction and in evaluating and scheduling routine maintenance and replacement. The school board already has acted to improve day-to-day facility management, but should consider broadening its efforts to improve staff coordination and expertise in planning, design, and construction.

It would be appropriate at this stage in the school systems' growth to commission a management study of current procedures and standards in these areas. The study could include an examination of the ways in which the school board could take advantage of private resources for planning, design, and/or construction of facilities. "Privatization" can mean many things, but usually refers to contracting with private firms that possess specialized expertise. For the Baltimore County Public Schools, this might mean contracting for over-the-shoulder consultation or for specific tasks such as preparation of school design standards, actual design, construction management, or varieties of design/build, built-to-suit, or construction-leaseback arrangements.

Improve facility planning and management by incorporating new management organization, strategies, and techniques. Full or partial privatization of school facility design, construction, and/or maintenance may be one strategy worth serious consideration.

4. Optimize Facility Flexibility

Given the tough job of matching school capacities to changing student populations, especially with restraints on shifting boundaries, it appears useful to examine the ways in which school facilities could be designed to provide flexibility over time in meeting elementary, middle, and high-school needs. There has been some discussion of clustering schools to allow "mixing and matching" among classrooms and other facilities to satisfy changing needs. School buildings are too expensive to construct with design limitations that allow only certain uses. At the same time, the school board should further examine the ways in which specific grade levels can be shifted among the hierarchy of school buildings. Such flexibility may be appropriate only for certain schools and certain grades, but would provide a means of adapting to shifting demands without building extra capacity.

School buildings should be designed with flexibility to improve the efficiency of school buildings, recognizing that trade-offs may be necessary between "ideal" and "affordable" schools.

5. New Ways to Meet Potential Facility Needs

The information received from the interviews indicated two major inadequacies of concern for future school construction: (1) an inadequate number of available school sites, and (2) inadequate funding available from existing resources to meet anticipated facility needs. Two techniques often used to meet these demands are school site reservations as development occurs and impact fees.

Reserving School Sites: Apparently the school board is running short of sites for new schools, especially high schools. Many jurisdictions require that school sites be reserved as part of the subdivision process, then acquired as needs emerge. According to planning director Pat Keller, this is also the case in Baltimore County, specifically in the Honeygo area in which much of the county's future development is expected to take place. The county plan for this area identifies future school sites; as development occurs the county expects to reserve them for acquisition.

The problem is scheduling funds for site acquisition, which should be part of the annual capital improvements program. **The site issue would be solved with more predictable planning for facility needs, as recommended in item #2.**

Financing School Construction with Impact Fees: School impact fees would represent new growth's fair share of school facility demands. An impact fee methodology would indicate the appropriate student space demands and resulting capital costs that new growth should pay. The major advantage of a school impact fee is that it will provide several million dollars a year in new revenues for school construction. For example, a school impact fee of \$4,000 per unit for 500 units annually would generate \$2 million. One of the disadvantages is that the impact fee is regressive since it is the same fee regardless of the market value of the house. Several Maryland jurisdictions levy impact fees to help pay for new schools. (For example, TA has prepared school impact fees for Charles and Frederick Counties.) If impact fees are levied, the County would need to meet facility needs in a timely manner to serve the new development.

It is recommended that serious consideration be given to implementing impact fees so new growth pays for its fair share of school capital costs.

Making Schools Part of Adequate Facility Requirements: It has been proposed that tying development approvals to availability of adequate school capacity would avoid future problems with overcrowding. Again, we understand that implementation of the Honeygo plan incorporates adequate facility requirements. Adequate facility requirements would not function in areas of existing development unless new development occurs, which appears to be relatively minor. An objection to countywide adequate facility requirements for schools is that needed development can be derailed by postponing programming of school construction.

The county and school board should focus their efforts on formulating a workable program of facility construction, maintenance, and replacement that would meet future needs. Making schools part of adequate facility requirements for all new development may help meet future school needs, although this regulatory constraint should be designed in such a way that it does not impact new development.

Relying on Existing Funding Sources: Without a more complete fiscal analysis the amount of funding needed for future school improvements cannot be precisely defined. However, it seems certain that moving ahead with a construction program to meet emerging facility needs, especially for new high school capacity, will require increased funding over and above past funding levels. Assuming that most of this funding will have to come from existing local and state sources, increases in local taxes will probably be required. The rationale for such increases, however, should be established by a carefully structured and well-publicized school construction program as recommended in item # 2.

Community support for future revenues required to fund school construction should be encouraged by establishing a credible record, in long-range planning and annual funding requests, for reasonable, equitable, and efficient school improvements. Voters are more likely to agree to bond issues if they are based on specific, rationally established plans, agreed to by both the County and School Board.

Maintaining Associated Growth Management Efforts: The county has created an enviable record for managing growth -- directing most development to designated areas where infrastructure exists or can be efficiently provided. For example, the URDL helps to keep growth in areas that can be readily served by existing as well as new schools, thereby making efficient use of existing assets. This is an important step to reducing future school needs, because it keeps development relatively concentrated near existing schools, which can be maintained, improved, and replaced as needed rather than having those investments written off as development migrates to new parts of the county.

It is recommended that the county maintain its current growth management policies that provide the best means of using existing infrastructure, including schools, efficiently.

**SUMMARY OF FACILITIES COVERED BY ADEQUATE PUBLIC FACILITIES
ORDINANCES IN MARYLAND - 1995**

County	Schools	Roads	Water	Sewer	Other
Anne Arundel	100% of State capacity; may exceed per Board of Ed.	Yes	Yes	Yes	Stormwater Drainage, Fire
Baltimore	120% of State capacity	Yes	Yes	Yes	
Calvert	110% of State capacity; may exceed per redistricting	Yes			
Carroll	Elem. - 105% of Local cap. Secondary - 110% of Local	Yes	Yes	Yes	Fire, Solid Waste Disp.
Charles	110% of State capacity; current or planned	Yes	Yes		
Frederick	Elem - 105% of State cap. Secondary - 110% of State	Yes	Yes	Yes	
Harford	120% of State capacity w/in 2 years (elementary), or 3 years (secondary)	Yes	Yes	Yes	
Howard	<u>School region</u> - lesser of 115% of program capacity, or 96% of core capacity, of elem. schools in region. <u>Elem. school</u> - lesser of 120% of program or core capacity of the school.	Yes	Yes	Yes	Housing Unit
Montgomery	110% of State capacity	Yes	Yes	Yes	Health Care, Fire, Police, Affordable Housing
Prince Georges	120% of State capacity	Yes	Yes	Yes	Stormwater Drainage, Fire, Police, Parks & Recreation
St. Mary's	100% of Local Board of Ed. Guidelines; current or planned	Yes	Yes	Yes	Stormwater Drainage, Fire
Washington	105% of State capacity; current or planned	Yes	Yes	Yes	Fire

Source: MD Office of Planning: Managing Maryland's Growth - Models and Guidelines. Adequate Public Facilities (6/96)

BOUNDARY CHANGE PRACTICES

1. During October, The Office of Student Data of the Baltimore County Public Schools analyzes the September 30 enrollment data from the schools. At a Superintendent's Staff meeting in October, the Office identifies those schools which are over capacity and also discusses situations where enrollments are exceptionally low. The Office of Student Data makes preliminary recommendations for addressing such concerns.
2. After the presentation to the Staff, an Area Superintendent and a representative of the Office of Student Data will meet with the principals of the affected schools. They will discuss the preliminary staff proposal for each school with the principal and will seek advice from the principal.
3. Following these meetings, the Staff will review such advice. It will then share the reviewed staff proposals with the members of the Board of Education in a Building Committee meeting in November. The PTA of each affected school will be notified of this public meeting through school newsletter or memoranda.
4. In December, the Area Superintendent and a representative of the Office of Student Data will meet with the members of the PTA Executive Boards of the affected schools to discuss the staff proposal. School newsletters or memoranda will be used to inform parents of this meeting.
5. In January, the Area Superintendent and a representative of the Office of Student Data will hold a community meeting to share pertinent information with the public and to present the staff proposal. This meeting will be held at least thirty-five (35) calendar days prior to final action by the Board.
6. A public hearing on the staff recommendation will be held by the Board of Education at least ten (10) days prior to action by the Board on this item.
7. The above steps may be condensed in case of emergency.

7/10/86

Revised 9/7/93

Edited 11/7/94 (Former Office of Pupil Assignments became Office of Student Data)

Office of Student Data

APPENDIX D

TABLES

**BALTIMORE COUNTY
ELEMENTARY SCHOOLS OVERCAPACITY**

<u>SCHOOL</u>		<u>"OFFICIAL"</u> <u>% OVER</u> <u>CAPACITY</u>	<u>"TRUE"</u> <u>% OVER</u> <u>CAPACITY</u>	<u>"PROJECTED"</u> <u>% OVER</u> <u>CAPACITY</u>	<u>"ADJUSTED"</u> <u>% OVER</u> <u>CAPACITY</u>
<u>Elementary</u>					
Catonsville		26.8%	15.6%	15.6%	19.8%
Featherbed Lane		37.4%	18.6%	-3.4% ¹	11.7%
Fifth District		20.0%	-2.0%	-2.0%	-0.5%
Reisterstown	(A)	20.5%	15.4%	15.4%	16.8%
Riderwood		22.8%	15.8%	15.8%	16.2%
Seventh District		29.9%	14.4%	-15.8% ¹	-14.0%
Hampton		23.6%	3.0%	3.0%	6.8%
Kingsville	(B)	24.2%	24.2%	24.2%	32.1%
Seven Oaks		29.8%	18.6%	-5.7% ²	-3.7%
Glyndon	(C)	19.5%	3.4%	-15.6% ²	-14.4%
Hillcrest		17.0%	9.7%	9.7%	11.9%

- (A) 20% or more overcapacity, NOT adjacent to less than 20% overcapacity school:
SUBJECT to development controls, as of October 13, 1995
- (B) 20% or more overcapacity, adjacent to less than 20% overcapacity school:
NOT subject to development controls, as of October 13, 1995
- (C) 17 to 19% or more overcapacity: NOT subject to development controls, as of
October 13, 1995

- ¹ Adopted FY 1997 Capital Budget
- ² Adopted FY 1997 Capital Program (FY 1998 to 2002)

"Official" overcapacity is based on the Development Control Law's definition of overcapacity.

"True" overcapacity is based on the Development Control Law after considering relocatable classrooms currently in use.

"Projected" overcapacity is based on the Development Control Law after considering relocatable classrooms and planned additions. If addition planned, assume relocatables removed; if no addition, relocatables remain in place.

"Adjusted" overcapacity is based on the Development Control Law after considering relocatable classrooms and planned additions, and the potential impact of proposed development projects, using average pupil yield factors.

**BALTIMORE COUNTY
MIDDLE AND HIGH SCHOOLS OVERCAPACITY**

<u>SCHOOL</u>	<u>"OFFICIAL"</u> <u>% OVER</u> <u>CAPACITY</u>	<u>"TRUE"</u> <u>% OVER</u> <u>CAPACITY</u>	<u>"PROJECTED"</u> <u>% OVER</u> <u>CAPACITY</u>	<u>PARTIAL</u> <u>"ADJUSTED"</u> <u>% OVER</u> <u>CAPACITY</u>
<u>Middle Schools:</u>				
Deer Park	5.5%	5.5%	5.5%	30.4%
Franklin	14.8%	2.1%	-18.8% ³	-13.9%
Perry Hall	10.6%	-2.5%	-10.9% ²	-9.6%
Pine Grove	5.1%	3.0%	3.0%	3.3%
<u>High Schools:</u>				
Catonsville	7.8%	3.3%	3.3%	4.0%
Carver Center	6.4%	-5.5%	-5.5%	NA
Franklin	29.7%	15.0%	-15.5% ³	-9.5%
Dulaney	38.6%	15.6%	-2.1% ³	1.1%
Perry Hall	28.2%	6.4%	-5.4% ¹	-4.0%

¹ Adopted FY 1996 Capital Budget

² Adopted FY 1997 Capital Budget

³ Adopted FY 1997 Capital Program (FY 1998 to 2002)

"Official" overcapacity is based on the Development Control Law's definition of overcapacity.

"True" overcapacity is based on the Development Control Law after considering relocatable classrooms currently in use.

"Projected" overcapacity is based on the Development Control Law after considering relocatable classrooms and planned additions. If addition planned, assume relocatables removed; if no addition, relocatables remain in place.

"Adjusted" overcapacity is based on the Development Control Law after considering relocatable classrooms and planned additions, and the potential impact of proposed development projects, using average pupil yield factors; incomplete due to difficulty in allocating projects, estimating impact of planned new schools, etc.

Ten Year Enrollment Estimate1996-2006

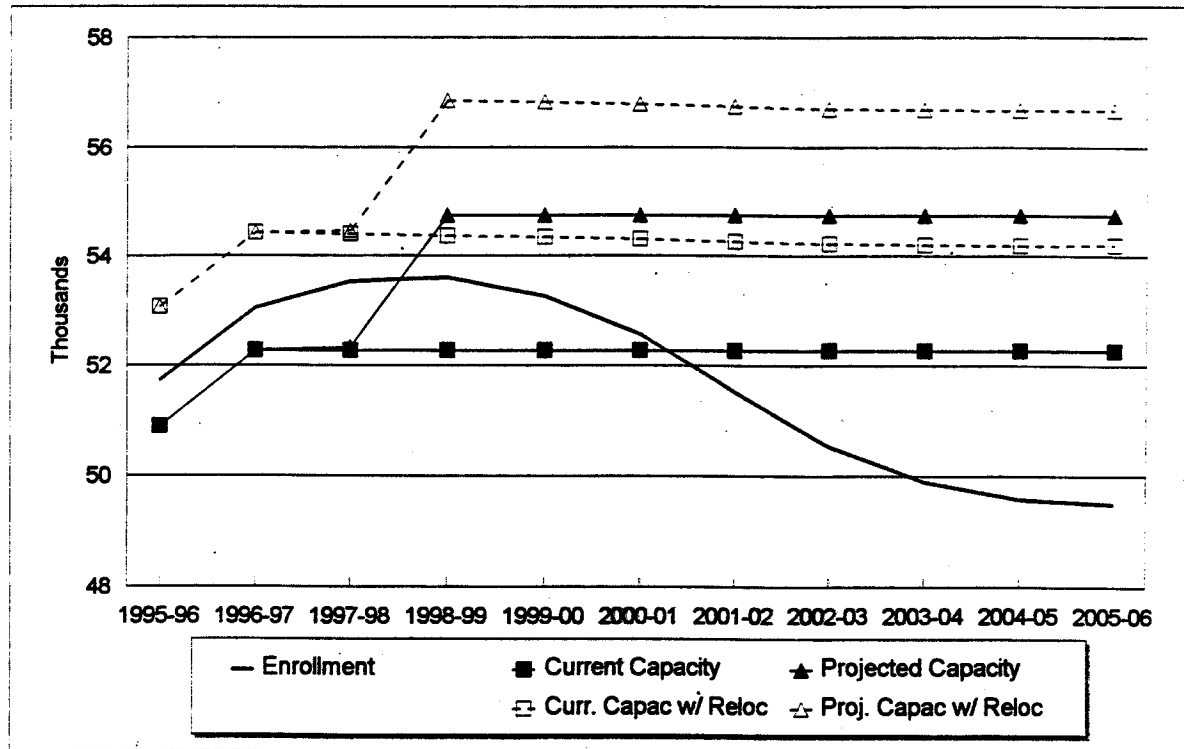
GRADE	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Pre-K	3100	3200	3300	3400	3400	3400	3400	3400	3400	3400
K	7665	7361	7092	6892	6816	6816	6816	6816	6816	6816
1	8678	8631	8288	7986	7760	7675	7675	7675	7675	7675
2	8534	8843	8795	8445	8138	7907	7821	7821	7821	7821
3	8451	8585	8896	8848	8496	8187	7954	7868	7868	7868
4	8345	8536	8671	8985	8936	8581	8269	8034	7947	7947
5	8279	8378	8570	8706	9021	8972	8615	8302	8066	7979
TTL. PreK-5	53052	53534	53612	53262	52567	51538	50550	49916	49593	49506
6	7870	8362	8462	8656	8793	9111	9062	8701	8385	8147
7	7997	7917	8412	8513	8708	8846	9166	9116	8753	8435
8	7576	7901	7822	8311	8411	8604	8740	9056	9007	8648
TTL. 6-8	23443	24180	24696	25480	25912	26561	26968	26873	26145	25230
9	8189	8144	8494	8409	8934	9042	9249	9396	9735	9683
10	7132	7591	7549	7874	7795	8282	8382	8574	8710	9024
11	6245	6590	7014	6975	7276	7203	7653	7745	7922	8048
12	5867	5958	6287	6691	6654	6941	6872	7301	7389	7558
TTL. 9-12	27433	28283	29344	29949	30659	31468	32156	33016	33756	34313
Sp.Ed.	532	532	532	532	532	532	532	532	532	532
Misc. Programs	221	221	221	221	221	221	221	221	221	221
Grand Total	104681	106750	108405	109444	109891	110320	110427	110558	110247	109802

BALTIMORE COUNTY, MARYLAND
FY 1997 CAPITAL BUDGET WITH PROPOSED REVISIONS (8/5/96)
SCHOOLS - ADDITIONS AND NEW BUILDINGS

	Total Est. Cost	Prior Authoriz	Total For 6-Yr Prog	FY 1997	Five Year Capital Program					Balance to Complete
					FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	
ELEMENTARY										
Featherbed Lane-Addition	\$1,300	\$0	\$1,300	\$1,300						
Franklin - Addition	1,600	0	1,600		\$1,600					
Glyndon - Addition	2,222	622	1,600		1,600					
Hebbville - Addition	1,600	0	1,600		1,600					
Mars Estates - Addition	1,375	0	1,375		1,375					
New Town - New	7,564	364	7,200		7,200					
Seven Oaks - Addition	1,600	0	1,600		1,600					
Seventh District - Addition	950	0	950	950						
Southwestern Area - New	9,472	4,100	5,372	4,897	475					
Sparks - Replacement	10,672	3,972	6,700		6,700					
Winfield - Addition	1,400	767	633	633						
Woodmoor - Addition/Ren.	2,500	767	1,733	1,733						
TOTAL	42,255	10,592	31,663	9,513	22,150	0	0	0	0	0
			0							
MIDDLE SCHOOL			0							
Catonsville - Addition	2,750	250	2,500				2,500			
Deer Park - Addition	7,500	0	7,500		500		7,000			
Franklin - Addition/Modernizati	9,500	0	9,500	711	8,789					
Perry Hall - Addition/Sprinklers	8,845	4,993	3,852	3,852						
TOTAL	28,595	5,243	23,352	4,563	9,289	0	9,500	0	0	0
			0							
HIGH SCHOOL			0							
Catonsville - Addition/Ren.	16,473	715	15,758		15,758					
Franklin - Addition	11,250	0	11,250	763	10,487					
Dulaney - Addition	11,250	0	11,250	763	10,487					
Painters Mill - New	33,000	0	33,000				31,350			
Parkville - Addition	11,250	0	11,250	763	10,487					
Perry Hall - Addition	11,222	7,740	3,482	2,782	700					
Pikesville - Addition	11,500	0	11,500		763		10,737			
TOTAL	105,945	8,455	97,490	5,071	50,332	0	42,087	0	0	0
GRAND TOTAL	\$176,795	\$24,290	\$152,505	\$19,147	\$81,771	\$0	\$51,587	\$0	\$0	\$0

TABLE 4

**BALTIMORE COUNTY, MARYLAND
BALTIMORE COUNTY PUBLIC SCHOOLS
TEN YEAR ENROLLMENT ESTIMATE AND CAPACITY FOR
ELEMENTARY SCHOOLS**



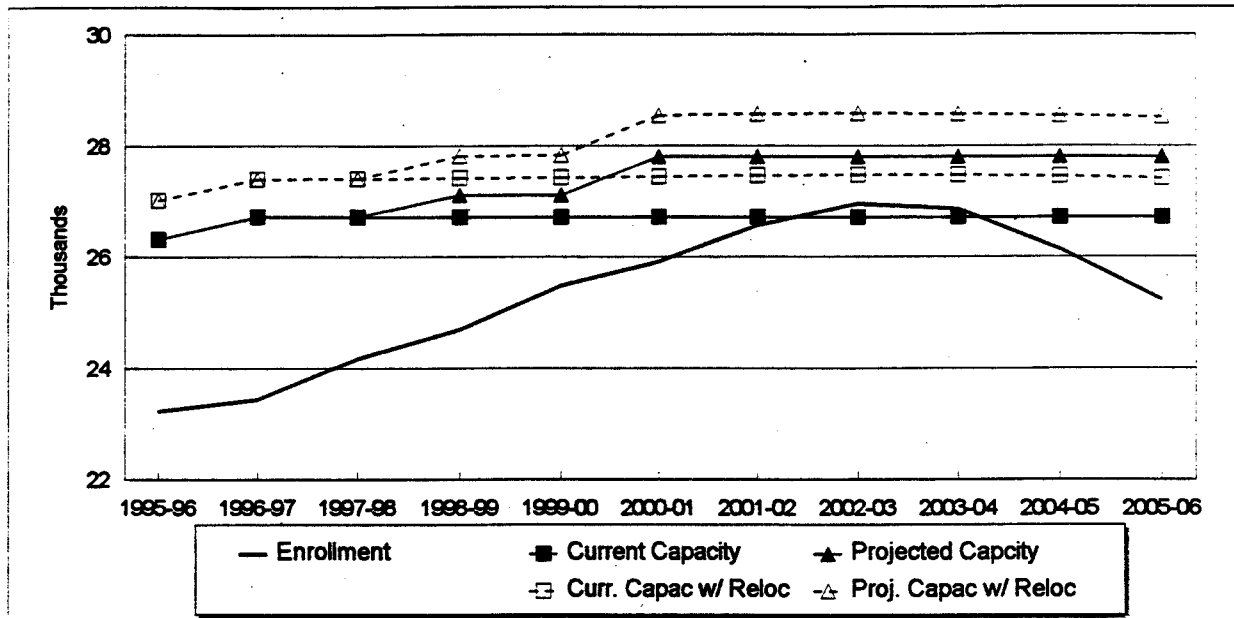
School Year	Enrollment Estimate	BCPS Capacity (a)
1995-96 act.	51,735	50,913
1996-97 est.	53,052	52,271
1997-98	53,534	52,328
1998-99	53,612	54,752
1999-00	53,262	54,752
2000-01	52,567	54,752
2001-02	51,538	54,752
2002-03	50,550	54,752
2003-04	49,916	54,752
2004-05	49,593	54,752
2005-06	49,506	54,752

(a) Includes projected capacity pursuant to additions and new schools funded in prior fiscal year.

NOTE: Relocatable classroom capacity shown on graph is actual 1995-96 utilization of current inventory adjusted by grade level share of total enrollment in subsequent years.

Source: Baltimore County Public Schools, Office of Student Data; FY 1997 Adopted Capital Budget and Program including proposed revisions (8/5/96).

**BALTIMORE COUNTY, MARYLAND
BALTIMORE COUNTY PUBLIC SCHOOLS
TEN YEAR ENROLLMENT ESTIMATE AND CAPACITY FOR
MIDDLE SCHOOLS**



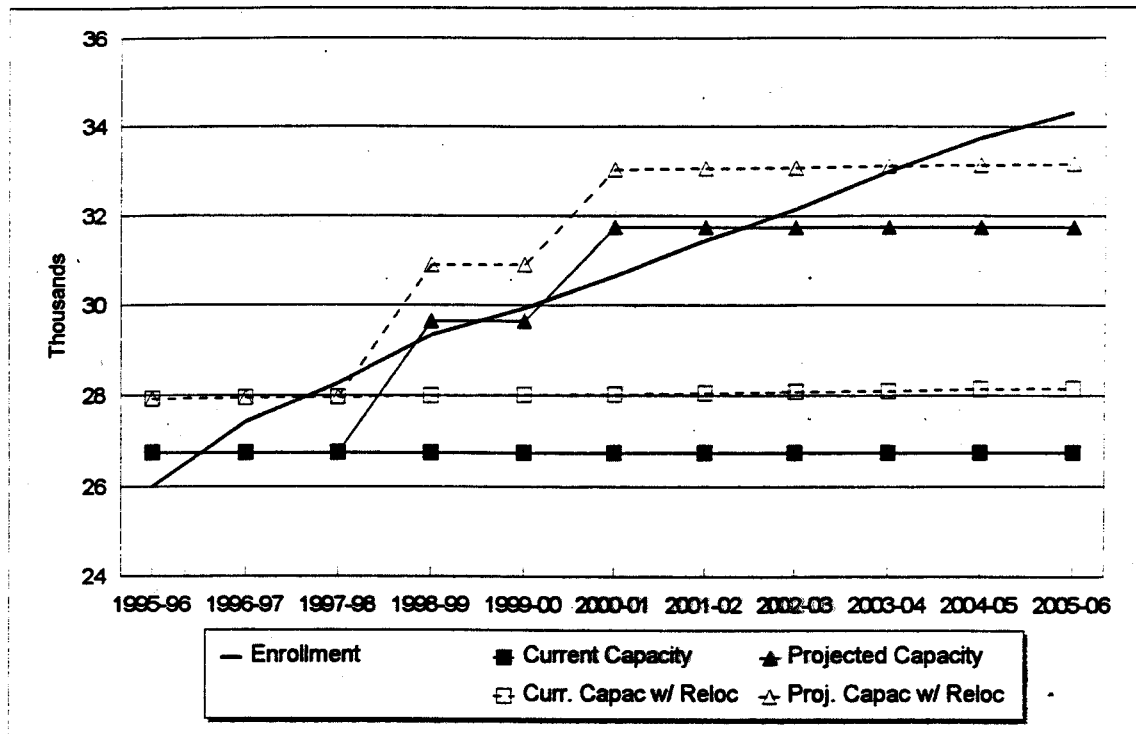
School Year		Enrollment Estimate	BCPS Capacity (a)
1995-96	act.	23,235	26,317
1996-97	est.	23,443	26,715
1997-98		24,180	26,715
1998-99		24,696	27,115
1999-00		25,480	27,115
2000-01		25,912	27,815
2001-02		26,561	27,815
2002-03		26,968	27,815
2003-04		26,873	27,815
2004-05		26,145	27,815
2005-06		25,230	27,815

(a) Includes projected capacity pursuant to additions and new schools funded in prior fiscal year.

NOTE: Relocatable classroom capacity shown on graph is actual 1995-96 utilization of current inventory adjusted by grade level share of total enrollment in subsequent years.

Source: Baltimore County Public Schools, Office of Student Data; FY 1997 Adopted Capital Budget and Program including proposed revisions (8/5/96).

**BALTIMORE COUNTY, MARYLAND
BALTIMORE COUNTY PUBLIC SCHOOLS
TEN YEAR ENROLLMENT ESTIMATE AND CAPACITY FOR
HIGH SCHOOLS**



School Year	Enrollment Estimate	BCPS Capacity (a)
1995-96 act.	26,013	26,754
1996-97 est.	27,433	26,754
1997-98	28,283	26,754
1998-99	29,344	29,654
1999-00	29,949	29,654
2000-01	30,659	31,754
2001-02	31,468	31,754
2002-03	32,156	31,754
2003-04	33,016	31,754
2004-05	33,756	31,754
2005-06	34,313	31,754

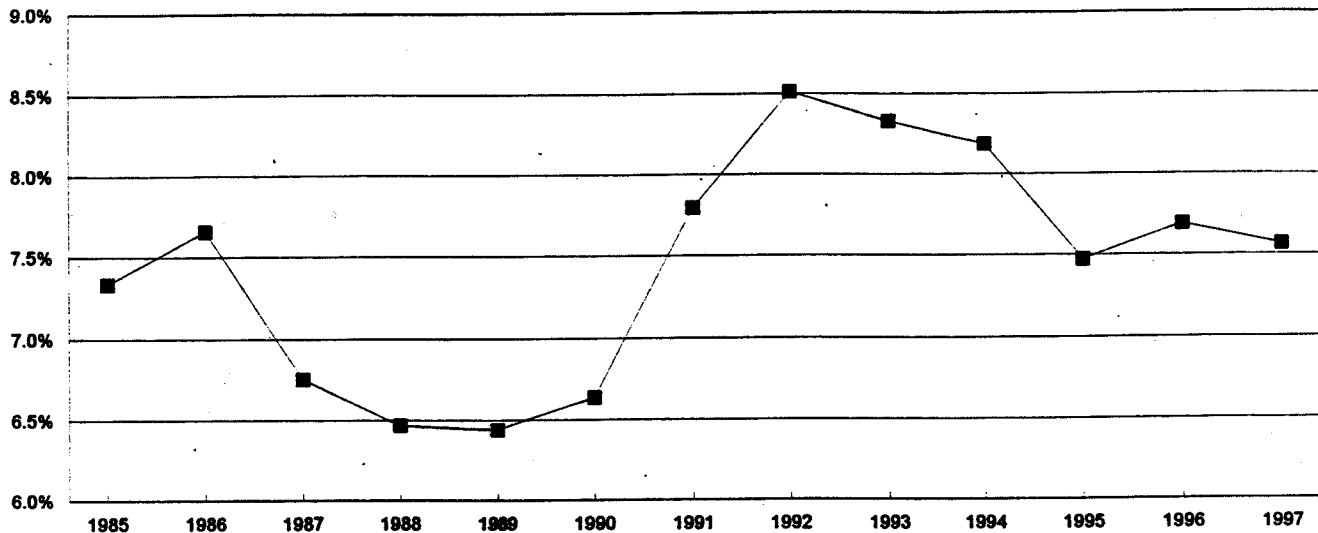
(a) Includes projected capacity pursuant to additions funded in prior fiscal year.

NOTE: Relocatable classroom capacity shown on graph is actual 1995-96 utilization of current inventory adjusted by grade level share of total enrollment in subsequent years.

Source: Baltimore County Public Schools, Office of Student Data; FY 1997 Adopted Capital Budget and Program including proposed revisions (8/5/96).

BALTIMORE COUNTY, MARYLAND

DEBT SERVICE TO TOTAL GENERAL FUND REVENUES Fiscal Years 1985 to 1997



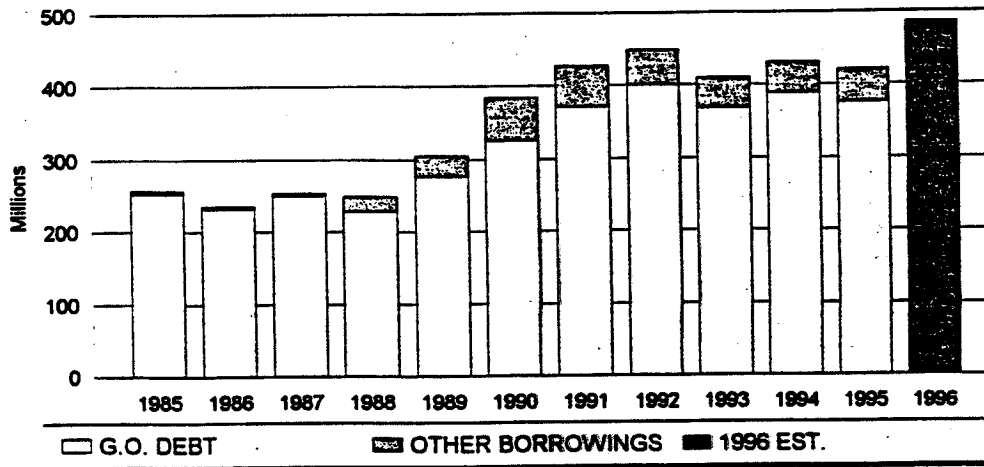
Fiscal Year	Total General Fund Revenues	Debt Service *	Debt Service/ Revenues Ratio
1985	\$570,915,904	\$41,881,021	7.3%
1986	590,361,657	45,212,131	7.7%
1987	633,587,471	42,782,690	6.8%
1988	688,248,138	44,511,364	6.5%
1989	733,403,105	47,229,889	6.4%
1990	792,369,875	52,580,384	6.6%
1991	820,557,654	63,953,476	7.8%
1992	801,995,002	68,239,158	8.5%
1993	844,559,646	70,338,690	8.3%
1994	864,330,812	70,757,472	8.2%
1995	891,915,401	66,654,807	7.5%
1996	910,240,625 est.	70,003,075 appr.	7.7%
1997	920,434,629 est.	69,621,175 appr.	7.6%

* Debt Service related to G.O. Debt and Other Borrowings as shown on page 1, except that debt service for the Education and Library lease costs are not included, because detail information was not readily available. The historical ratios should not change significantly with the debt service for these lease costs.

Sources: Baltimore County Annual Budget Documents
Baltimore County Comprehensive Annual Financial Reports

BALTIMORE COUNTY, MARYLAND

**GENERAL OBLIGATION (G.O.) DEBT AND
NON-G.O. DEBT (OTHER BORROWINGS)
OUTSTANDING AT YEAR END
Fiscal Years 1985 to 1996**



Fiscal Year	General Obligation Debt *	Other Borrowings**	Total
1985	\$252,992,321	\$4,192,250	\$257,184,571
1986	231,368,625	4,035,851	235,404,476
1987	250,526,929	3,301,192	253,828,121
1988	228,032,232	20,754,783	248,787,015
1989	276,532,536	28,965,164	305,497,700
1990	325,967,840	58,909,622	384,877,462
1991	371,273,560	55,339,180	426,612,740
1992	400,074,560	48,373,667	448,448,227
1993	368,150,000	41,440,628	409,590,628
1994	388,690,000	42,249,815	430,939,815
1995	375,795,000	44,345,000	420,140,000
1996 est***	NA	NA	485,723,000

* G.O. Bonds, Including Consolidated Public Improvements (County share of school debt only), and Excluding Pension Bonds.

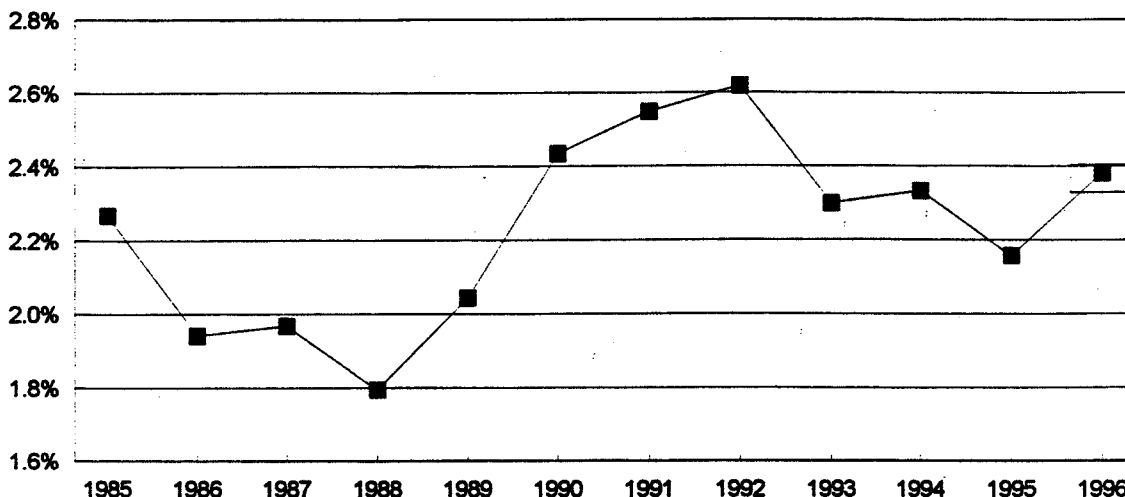
** Non-G.O. Debt, including leases, equipment financing, and certificates of participation.

*** Estimate of total debt at FY 1996 year-end prepared by debt consultant (Public Resources Advisory Group).

Source: Baltimore County Comprehensive Annual Financial Reports, Office of Budget and Finance

BALTIMORE COUNTY, MARYLAND

TOTAL DEBT TO PERSONAL INCOME
Fiscal Years 1985 to 1996



Fiscal Year	Debt Ratios to Personal Income		
	G.O. Bonds *	Other Borrowings	Total Debt
1985	2.2%	0.0%	2.3%
1986	1.9%	0.0%	1.9%
1987	1.9%	0.0%	2.0%
1988	1.6%	0.1%	1.8%
1989	1.8%	0.2%	2.0%
1990	2.1%	0.4%	2.4%
1991	2.2%	0.3%	2.5%
1992	2.3%	0.3%	2.6%
1993	2.1%	0.2%	2.3%
1994	2.1%	0.2%	2.3%
1995	1.9%	0.2%	2.2%
1996 (est)**	NA	NA	2.4%

* G.O. Bonds, Including Consolidated Public Improvements (with County share of school debt), and Excluding Pension Bonds

** Based on estimate of total debt at FY 1996 year-end prepared by debt consultant (Public Resources Advisory Group), and 1996 personal income forecasts provided by Towson State University, Center for Area Resource Development

Sources: Baltimore County Comprehensive Annual Financial Reports; Towson State University, Center for Area Resource Development; Office of Budget and Finance

BALTIMORE COUNTY, MARYLAND

**CONSOLIDATED PUBLIC IMPROVEMENTS BOND REFERENDA -
AUTHORIZED AND UNISSUED DEBT AMOUNTS
November 1986, 1988, 1990, 1992, 1994 and 1996**

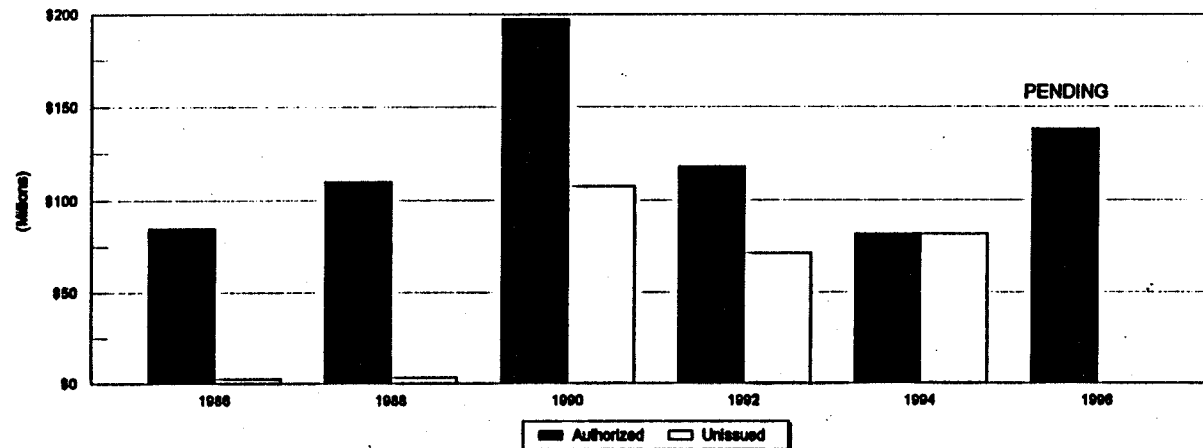


TABLE 9

Project Classification	Referenda Amount* (\$ million)													
	1986		1988		1990		1992		1994		1996	Grand Total		Percent
	Total Authorized	Total Unissued	Total Authorized	Total Unissued	Total Authorized	Total Unissued	Total Authorized	Total Unissued	Total Authorized	Total Unissued	Total to be Authorized	Grand Total Authorized	Grand Total Unissued	Percent Unissued
Streets, Bridges, Drains	\$38.000	--	\$60.000	--	\$80.210	\$55.180	\$47.391	\$47.391	\$10.773	\$10.773	\$4.734	\$271.108	\$148.078	54.6%
Refuse Disposal	1.000	--	3.500	--	9.650	0.950	11.000	11.000	9.550	9.550	--	34.700	21.500	62.0%
Community Colleges	3.500	--	6.000	--	6.935	6.335	3.282	3.282	6.620	6.620	6.973	33.310	23.210	69.7%
Operational Buildings	20.000	--	9.000	--	45.895	33.495	--	--	--	--	9.977	84.872	43.472	51.2%
Parks, Preserv, Greenways	2.000	--	1.500	\$0.640	4.835	4.835	3.022	3.022	1.519	1.519	2.402	15.278	12.418	81.3%
Schools	12.000	--	18.500	--	39.900	0.000	46.110	0.000	48.217	48.177	66.618	231.345	114.795	49.6%
Libraries	0.500	--	1.000	--	2.050	0.000	1.000	0.550	--	--	--	4.550	0.550	12.1%
Senior Centers	0.900	--	1.500	--	0.500	0.500	--	--	--	--	--	2.900	0.500	17.2%
Agricultural Preservation	--	--	1.500	1.500	--	--	0.660	0.660	0.500	0.500	3.000	5.660	5.660	100.0%
Community Improvements	4.000	\$2.500	1.000	1.000	--	--	1.650	1.650	3.500	3.500	9.675	19.825	18.325	92.4%
Waterway Improvements	1.000	--	6.500	0.000	7.400	6.400	3.152	3.152	--	--	4.448	22.500	14.000	62.2%
Affordable/Elderly Housing	--	--	--	--	--	--	0.600	0.600	1.000	1.000	0.350	1.950	1.950	100.0%
Handicapped Activity	2.000	=	=	=	=	=	=	=	=	=	=	2.000	=	0.0%
Total	\$84.900	\$2.500	\$110.000	\$3.140	\$197.375	\$107.695	\$117.867	\$71.307	\$81.679	\$81.639	\$138.177	\$729.998*	\$404.458*	55.4%

* The only other unissued amounts are from the 1980 Referendum with a \$600,000 authorized but unissued balance (\$500,000 in Agricultural Preservation and \$100,000 in Oregon Ridge), yielding Grand Total Authorized Debt of \$730,598,000 and Grand Total Unissued \$405,058,000.